1979

Effects of spouse counseling on the treatment outcome of the problem drinker

Paul J. Johnston
College of William & Mary - School of Education

INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.

JOHNSTON, PAUL JOSEPH

EFFECTS OF SPOUSE COUNSELING ON THE TREATMENT OUTCOME OF THE PROBLEM DRINKER

The College of William and Mary in Virginia ED.D. 1979

EFFECTS OF SPOUSE COUNSELING ON THE TREATMENT OUTCOME OF THE PROBLEM DRINKER

A Dissertation
Presented To
The Faculty of the School of Education
College of William and Mary

In Partial Fulfillment
Of the Requirements for the Degree
Of
Doctor of Education

By
Paul J. Johnston
Fall, 1979

APPROVAL SHEET

We the undersigned do certify that we have read this dissertation and that in our individual opinions it is acceptable in both scope and quality as a dissertation for the degree of Doctor of Education.

Accepted Fall, 1979

Curtis H. O'Shell, Ed. D.,
Chairman

Fred L. Adair, Ph. D.

Charles O. Matthews II, Ph. D.

TABLE OF CONTENTS

ACKNOWLEDGMENTS

Many persons have influenced and stimulated the successful completion of this study. I would like to publicly acknowledge my gratitude for their generous assistance.

To Major David L. Sanders for being a supportive and understanding manager.

To Mr. Tom Ray and SSGT Tony Colon for their cooperation, enthusiasm, and creative group facilitation.

To Ms. Jan Tracy and Ms. Evelyn Mayer for their patience and dedication in their administrative support.

LIST OF TABLES

LIST OF TABLES (Continued)

LIST OF TABLES (Continued)

Chapter 1

INTRODUCTION

When people talk about alcoholism counseling they are almost always talking about the assistance rendered to the problem drinker. With estimates of 9 - 11 million alcoholic persons in the United States and each affecting an average of four people, there are 36-44 million family members who are also suffering from the disease (El-Guebaly & Offord, 1977).

Alcoholism is a family affair because it can affect family stability, values, attitudes, mental and physical health, and pocketbooks (DHEW, 1974). Additionally, in alcoholic families, there are several features of childhood disturbances which occur so frequently that they may be considered characteristic of, though not unique to, alcoholism. These include stuttering, bed wetting, temper tantrums, and fighting with peers (El-Guebaly and Offord, 1977). Unfortunately, most treatment programs although acknowledging the need and a desire to work with the family, paradoxically, do little or nothing for/with the family.

Alcoholics Anonymous, the largest single alcohol treatment program also spawned the largest family treatment program--Al Anon and Ala-Teen. These organizations teach educational

information concerning the nature of alcoholism as an illness. Additionally both promote a program to instill the courage to live by this knowledge, thereby helping love replace fear in the family. Other nationally respected alcohol programs such as Hazelden and the one at Johns Hopkins University also advocate: a) Learning the facts about alcoholism; and b) Developing an attitude of "tough love" to match the facts (Hazelden, nd., and Schneidnuhl, Augustus, and Sehall, 1972). The goal is for the family to grow emotionally before, during, and after the alcoholic recovers in order to prevent deleterious estrangements.

The studies reviewed offered a fairly persistent theme of the advantage of involving the spouse and family of the alcoholic in treatment. Corder, Corder, and Laidlaw (1972) reported a significant difference ($p < .05$) in abstinence rates and in participation in follow-up treatment for those involved in family treatment. Gliedman, Rosenthal, Frank, and Nash (1972) reported significant improvement on a number of measures including drinking behaviors and the alcoholic's descriptions of their wives. Janzen (1977) in his review of 24 studies concluded, although there is no single definition of family therapy nor one single theory behind it, nor studies with a research design which

permits firm conclusions, there is agreement that family therapy can be beneficial for both the alcoholic and the family.

Theoretical Background

In the voluminous literature in the field of alcoholism which discusses marital and family dynamics, relatively few studies have been reported concerning treatment approaches that specifically address marital and family interaction as the unit of treatment. The priority issue has been the transformation of alcoholism from a moral into a medical problem. The resulting medical model is designed primarily to describe disease processes as they affect an individual. Within such a concept one family member is labeled sick and becomes the patient. Work with any others who have a relationship with the alcoholic is just an adjunct of the treatment efforts.

While explicit reference to the literature on family treatment is brief, it is significant enough for the Second Special Report to the U.S. Congress on Alcohol and Health (1974) to call family therapy "the most notable current advance in the area of psychotherapy (of alcoholism)." It hasn't always been this way. The early interest in family issues and alcoholism focused on the clinical description of the marriages between male alcoholics

and their wives. Initially the personality studies of the wife stressed her disturbance and poor integration, with emphasis on dependency conflicts. This disturbed-personality theory was the first postulated to account for abnormalities seen in the wives of alcoholics. The classic clinical description (Boggs, 1944; Price, 1945; and Whalen, 1953) of wives of alcoholics was that of aggressive domineering women who married to mother or control a man.

In opposition to the disturbed-personality theories is the stress theory of Jackson (1954). As an empirical test of her theory, she studied the women who belonged to Al-Anon over a three-year period. She concluded the wives and families pass through seven stages in reacting to alcoholism in the husbands or fathers. These stages are: 1) Attempts to deny the problem; 2) Attempts to eliminate the problems; 3) Disorganization; 4) Attempts to reorganize in spite of the problems; 5) Efforts to escape; 6) Reorganization of part of the family; and 7) Recovery and reorganization of the whole family (pp. 569-584). Jackson viewed families as involved in a cumulative crisis in which all members behave in a manner which they hope will meet the crisis and permit a return to stability. Thus,

the behavior of the wife is largely a function of changing patterns of interaction and not solely a consequence of personality disturbance or personality type (Edwards, Harvey, and Whitehead, 1973).

The latter part of Jackson's hypothesis has received support from a variety of investigations. Bailey, Haberman, and Alksne (1962), Lemert (1960), Clifford (1960), and Edwards, et al. all agree the wife of the alcoholic may or may not react to the stress of her marriage with personality dysfunction.

These studies are important for another reason. Jackson (1962) speaking for those working with the spouse of the alcoholic, summarized their position when she noted: "Once attention had been focused on the families of alcoholics, it became obvious that the relationship between the alcoholic and his family is not a one-way relationship. The family also affects the alcoholic and his illness. The family can either help or interfere with the treatment process (p. 91)."

Involvement of the family in treatment can take place before (Berman, 1968), during (Steinglass, Davis, and Berenson, 1977), and sometimes without (Burton and Kaplan, 1968) hospital care. Wives are seen alone in separate

interviews (Ewing, Long, and Wengle, 1961), in a group with other wives (Smith, 1969), or jointly with their husbands (Meeks and Kelly, 1970), and sometimes the couple is seen in a group with other couples (Hedberg and Campbell, 1974). Each of these studies encourages a greater use of family therapy. However, at the present time there is little hard evidence demonstrating either the efficacy of family therapy by itself (Olsen, 1970) or the comparative value of family therapy versus more traditional forms of therapy in the treatment of alcoholism (Janzen, 1977; Steinglass, 1977).

No matter what stance or theory the authors in this field promote, all agree that alcoholism saps the energy of the other parties by forcing them to expend their energies to live with/around the alcoholic person. There is no predominant theoretical mode of alcoholism and the family. This appears to be the result of alcoholism counselors practicing family therapy, rather than family therapist practicing alcoholism counseling. To date the focus, regardless of therapist orientation, is to help the spouse (family) develop her/his own potential before, during, and after the alcoholic recovers in order to prevent serious

estrangements from occurring.

Need for the Study

From 1945 (Baker) to 1977 (Jansen) the literature has had proponents who advocated the treatment of the wife is often as important as the treatment of the alcoholic. These writers and others already mentioned present a strong case that family treatment for alcoholism can be successful. While the advantages of family treatment have been highlighted, the question remains whether anything definitive can be said, at this time, about the comparative effectiveness of family treatment.

Two relevant sub-issues must also be considered. One, which primary treatment focus, education or counseling, works most effectively in a spouse program? The second concern is a tangent to the first. How does one define most effectively, or which dimension(s), abstinence, social, vocational), etc., in the rehabilitation of the alcoholic should be used?

The literature offers no clear guide whether education or counseling is favored. If one reviews the literature of Alcoholics Anonymous (1955), Al-Anon (1972), the Christopher D.

Smithers Foundations (1968), and the Johnson Institute (Johnson, 1973) he will find all of these recognized leaders of alcoholism rehabilitation programs seldom distinguish between education and counseling treatment modalities. One is considered part of the other. Therefore, although somewhat arbitrary and artificial, this study for purposes of research differentiated between an education-focused and a counseling-focused therapy program. (An outline of each is found in Appendix D).

The second issue has precedent in the literature. Traditionally, abstinence has been the major criterion to measure improvement in therapy with alcoholics. However, according to Burton and Kaplan (1968b) it is a meaningful criteria only if it correlates with improvements in other areas. Abstinence is only one dimension in the rehabilitation of an alcoholic. Others to be considered are emotional, social, and vocational functioning (Clancy, Vornbrock, and Vandenhoof, 1965; Goldfried, 1969; and Pokorny, Miller, and Cleveland, 1968).

The studies to date have been largely characterized by selective samples and lack of controls. A review of the

literature from 1952 to 1973 on the psychological treatment of alcoholism was reported by Emrick (1974, 1975). Though this review includes 397 studies, only three of these were related to family treatment. This was probably because of two reasons. Most reports did not meet the data-reporting criteria he set for inclusion in his sample. Secondly, the relative newness of family therapy practices to alcoholism counseling gives one only a limited number to choose from. Crawford and Chalupsky (1972) evaluated the state of the art in alcoholism treatment programs for the years 1968 - 1971 and found the same problem of lack of a scientific design. According to Steinglass (1977) the current studies of family treatment, although valuable, should be viewed as pilot or exploratory ventures, rather than definite attempts to validate a treatment method.

Statement of the Problem

The purpose of this study was to test the effects of spouse counseling on the treatment outcome of the alcoholic. A review of the literature showed the research on alcoholism and marriage has to date been conducted primarily on a descriptive level. The experimental field study proposed to answer the question: Which, if any, of two treatment modes: a) an education focused group;

or b) a reality oriented counseling group with the spouses of the problem drinker has an effect on his outcome.

Major Hypotheses

For the purposes of this research, the following hypotheses were formulated:

1. Problem drinkers whose wives participate in spouse therapy will manifest a greater reduction in alcohol consumption than problem drinkers treated alone.

2. Problem drinkers whose wives participate in spouse therapy will have a greater reduction in alcohol related incidents than the controls.

3. Problem drinkers whose wives participate in spouse therapy will show a more favorable prognosis in family interaction as measured on the Mooney Problem Checklist and the Marital Communication Inventory than problem drinkers treated alone.

4. Problem drinkers whose wives participate in spouse therapy will show a more favorable prognosis in duty performance than the controls.

5. There is no significant difference between the self-assessment of the problem drinker and that of the wives participating in spouse therapy as measured on the Michigan

Alcoholism Screening Test.

6. There is no significant difference in the treatment outcomes of the problem drinkers whose spouse participated in the education group and those whose spouse treatment was the counseling group.

7. There is no significant difference in the treatment outcomes of the problem drinkers whose spouse participates in concurrent therapy and those whose spouse treatment was after the problem drinker completes his program.

Limitations

Treatment groups were led by agency certified, paraprofessional alcohol counselors at the Langley Air Force Base Social Actions Office and may not be representative of the breadth of family therapy expertise.

The population was exclusively drawn from a small number of military and civilian problem drinkers and their spouses. This sample may not adequately represent alcoholics in general.

The study was limited to the effects noted from a ten-week treatment on instruments which in turn are confined by their reliability and validity.

For the purpose of this study, the wife was assumed to have an essentially normal personality, in that no known abnormality was uncovered or admitted to by the women.

Definition of Terms

The following terms are defined for the purpose of the investigation:

Alcohol Related Incident - An incident in which alcohol was a factor. For example, the use of an alcoholic beverage that leads to a person's misconduct or unacceptable social behavior or to the impairment of duty performance, physical or mental health, financial responsibility, or personal relationships.

Problem Drinker - persons identified and entered into USAF/Langley AFB alcohol rehabilitation program. Used synonymously with alcoholic.

Spouse - the problem drinker's wife.

Successful/Unsuccessful Alcohol Program Completion - a joint decision of a doctor, the alcohol counselor, and the individual's commander and supervisor. Criteria is completion of the treatment regimen prescribed by this committee and no further known alcohol incident.

Supervisor's Rating - a scaled ranking made by the problem drinker's immediate supervisor; usually covering the preceding 90-day work period.

Chapter 2

REVIEW OF THE LITERATURE

In discussing the alcoholic and his spouse, there seems to be three distinct categories in which the literature is divided. Support for this contention is drawn from the fact that the major subject reviews of the literature (Bailey, 1960; Janzen, 1977; Steinglass, 1977) divided the field into mental health status of the wife, concurrent group therapy, and conjoint group therapy. Conveniently, these groups fall into separate time periods which although overlapping have a definitive beginning. Therefore, it is appropriate for this review to follow this example.

The Wife of the Alcoholic

The characterization of the wife of the alcoholic has undergone several changes. Initially, she was described as an aggressive woman who married an alcoholic to fulfill her need to be dominant (Whalen, 1953). Next, her personality was thought to fluctuate with the stress of an alcoholic marriage (Jackson, 1954). The latest stance is that of a woman who manifests no distinctive personality characteristic or pathological disturbance (Edwards, Harvey, and Whitehead, 1973).

The first image resulted from the disturbed-personality theory popular during the late forties and early fifties (Boggs, 1943; Futterman, 1953). The second reflects the stress theory postulated by Jackson. The third position is the conclusion reached after clinical research was conducted.

The disturbed-personality theorists were most often social workers or psychologists directly involved in the treatment of alcoholics and their wives. Their studies were primarily clinical impressions of wives seen in treatment (Price, 1945; Whalen, 1953, and Macdonald, 1965).

Price reported the wives of alcoholics to be, with few exceptions, markedly hostile, dependent people. She described the wife as an insecure person who brought to her marriage feelings of uncertainty which she hoped would be met by her husband. When the husband proved incapable of such, she felt unloved, resentful, and aggressive. Thus a vicious circle continued.

Price derived her impression from studying the results of forty interviews. She gathered these during a ten-month period from the wives of alcoholic patients of whom the latter were admitted to a hospital for the inebriate. For the purpose of her paper, she arranged these schedules in alphabetical order

and selected every other one. Those selected for the study had the following characteristics: a) nineteen of the twenty were native-born Americans, and one was born in Ireland; b) nineteen were white, and one was black; c) eleven of the group had been married from nine to fifteen years. No specific information was given on education or socio-economic status.

Whalen also gave a subjective analysis of her work in a psychotherapy-oriented family agency. She theorized the wives of alcoholics could generally be placed in one of four categories; Suffering Susan who has the need to punish herself and therefore chose a troublesome partner; Controlling Catherine needs to dominate and so marries a man who she feels to be inadequate or inferior; Wavering Winnifred is so insecure that she chooses a weak husband who needs her desperately; and Punitive Polly whose relationship with her husband closely resembles a scolding, but indulgent, mother and her very small boy.

Both of these studies suffer from the same limitations. They are subjective clinical observations based on a small number of cases. There was no reported vertification through clinical data such as personality tests or independent verifying therapists. These studies unfortunately stated their data as though they

represented experimental results.

In a related study, Macdonald after empirical investigation concluded that wives of alcoholics decompensate when their husbands move toward sobriety. He reviewed a total of eighteen cases of mental disorder occurring in wives of alcoholics who were admitted to a mental hospital. In eleven of these cases, acute decompensation was associated with a decrease in the husband's drinking. In the others, six husband's drinking patterns were unchanged and one increased. Macdonald cautioned the readers to be aware of the "post hoc, ergo propter hoc" fallacy and reported that the patients all had long-standing severe character disorders. He emphasized that his report was preliminary in nature and further large-scale investigations with appropriate statistical analysis would be necessary before the conclusions could be validated.

The above studies represent the zeitgeist of the early psychiatrists and psychiatric social workers. A different approach was employed by sociologists. The latter group proceeded from theories about families under stress and attempted to study the way in which the family as a unit adjusts to the alcoholic.

The most quoted study of the "stress theory" is Jackson's (1954) report of her three year investigation of Al-Anon groups. The examination of her verbatim shorthand notes of these discussion groups indicated wives and families seem to pass through seven stages in dealing with the alcoholism of the husband or father. She theorized "The family is involved in a cumulative crisis. All family members behave in a manner which they hope will resolve the crisis and permit a return to stability. The behavior of family members in each phase of the crisis contributes to the form which the crisis takes in the following stages and sets the limits on possible behavior in sequential stages (p. 567)".

Jackson stated her presentation was limited in the following areas: 1) It deals only with families seeking help for the alcoholic husband; 2) It deals only with the families of male alcoholics; 3) For the sake of clarity and brevity, only the accounts of the wives are considered. A complete picture would include the view of the husband and children. No attempt was made to verify their accuracy. Additionally, the report was based on approximately fifty families of the middle and lower classes in Seattle.

In an attempt to verify Jackson's findings, Lemert (1960) interviewed 116 families in the Sacramento, California region. One hundred and five usable samples were obtained. The population was drawn from the divorce court, a public welfare agency, country commitments to state hospitals, police probation cases, and from area Al-Anon groups. The ethnic group of Mexican-American was underrepresented and no Japanese-American families were included. The black representation was proportionate to its population of the area.

The schedule was devised to establish the chronological developments in the drinking problem and the concomitant family adjustments. Lemert concluded the data obtained did not demonstrate the seven discrete stages postulated by Jackson. Instead, early middle and late stages appeared to be a more realistic expectation. Additionally, the major discovery of this research was a very large number of marriages were entered into when drinking was already a serious problem for the man. Although this was in conflict with Jackson's data, Lamert's overall findings did support the stress theory.

James and Goldman (1971) attempted to integrate Jacksons stages of family adjustment with the coping behaviors that had been

identified by Oxford and Guthrie (1968). The former wished to assess the pattern of behavior of the wives at different stages of their husband's alcoholism.

They interviewed 85 wives, all of whom had been offered group therapy, although approximately half did not attend. The wives' average age at the time of the interview was 42 years, the husband age, 44. They had been married an average of 19 years and had 3.5 children; 63% of the alcoholics had blue-collar occupations, 27% white-collar, and 10% professional-executive. The alcoholics had held the same job for an average of 9.5 years (p. 374).

While cautioning against causal theories, they concluded the results of their study seem to favor Jackson's theory. Similar to Jackson they found the wife's behavior and current coping style may be caused by the current stage of the husband's drinking, rather than a situation in which the wife's fixed personality pathologies caused the husband's pliable personality to change via alcoholism which then allows her to employ her latent coping mechanism (p. 380)."

Bailey (1961) reviewed the major literature relating to alcoholism and marriage and concluded there was a paucity of

reported research in the psychiatric, psychological, and sociological journals. The bulk of the periodical literature on alcoholism and marriage to that date (and to the present) had appeared in the Quarterly Journal of Studies on Alcohol. She also chastized her colleagues and emplored them to use studies of a more rigorous design. She saw the necessity of increasing the sophistication of the design and employing more refined tools of measurement.

Apparently, Haberman (1964) heard Bailey's cry for more rigorous methodology and responded. In a research project conducted for the National Council on Alcoholism, the Index of Psycho-physiological Disturbance was administered to 262 women who were or had been married to alcoholics. The Index consisting of 22 questions about symptoms usually associated with mental disturbance was first used in the Midtown Manhattan Study (Shole, Lannger, Michael, Opler, and Rennie, 1962). Only those cases which clearly contrasted total abstinence with drinking (156) were analyzed.

Thirty-five percent of the 537 married women in the representative sample of the Midtown Manhattan Study (conducted on normal, non-alcoholic women) had Index scores of four or

more symptoms, connotating a moderate degree of disturbance. Forty-one percent of the 156 wives in Haberman's study had four or more symptoms when their husbands were abstinent. Thus, the spouses of the alcoholics had comparable scores to the Midtown wives; still the wives of alcoholics did report slightly more symptoms, even when their mates were sober. Haberman, therefore, concluded the results do not support the early theories about the spouses of the alcoholic having an abnormal personality.

This study expanded the literature due to the fact that it compared its findings to normals. It also was one of the first to get opinions from both wives actively trying to save their alcoholic marriages and those who had dissolved it. Unfortunately, generalizability is limited because no description of the age, ethnic, educational, and geographical characteristics of subjects is given. Another research fault is it required subjects to recall past, often lengthy, periods of time.

A similar study by Tarter (1976) was conducted with the objective of determining the clinical status and personality structure of wives of alcoholics while their husbands were inpatients in a alcoholism program. Thirty-eight wives volunteered and were given the MMPI and California Psychological Inventory

(CPI) to take at home. All of the subjects completed the MMPI but only 23 finished the CPI.

Although perusal of the MMPI protocols did reveal a tendency for several of the wives to respond to the test in a defensive manner, examination of their profiles did not reveal a common personality configuration. On the CPI, the women obtained a mean T-score within the normal ranges of all scales. Based on these findings the author concluded the wives of alcoholics did not present themselves as severely disturbed individuals who are responsible for their husband's drinking.

A critical review of Tarter's study would fault his inadequate description of his subjects. Only the mean age (43.1 years) was given. No other demographic statistics on the wives or their husbands was provided.

Paloino, McCrady, Diamond and Longabaugh (1976) conducted a corresponding study. They administered the Lanyon Psychological Screening Inventory (PSI) to 40 spouses of hospitalized white alcoholics (15 women) admitted to a private, non-profit psychiatric hospital.

Scores of the normative sample for the PSI were used as controls. Although all subject scores fell within the normal

range, the spouses scored significantly higher than the normative sample on the defensiveness scale. The authors used these results coupled with their literature review to conclude the disturbed-personality theory regarding spouses of alcoholics has little empirical support.

They stated their study should only be considered preliminary for the results are only for one point in time and an in-depth conclusion would need a longitudinal study. Another limitation recognized by the authors was the subjects were limited to those not divorced or separated, this could be a bias towards a healthier group. And the PSI was originally designed as a screening instrument and has had limited research as a measure of psychopathology.

In summary, Edward et al. (1973) said it best when they stated:

> "The research on the wives of alcoholics now seems to indicate that they are women who have essentially normal personalities of different types, rather than of any one particular type. They may suffer personality dysfunction when their husbands are active alcoholics, but if their husbands become abstinent and the periods of abstinence increase the wives experience less and less dysfunction.

> Concurrent with these personality fluctuations are changes in the wives methods of coping with their husband's drinking patterns and in the roles the wives play within the family. In all of this, these women seem much like other women experiencing marital problems. Until new theoretical perspectives or new data are brought to bear on this question, the only tenable proposition about wives of alcoholics is, therefore, essentially a null hypothesis -- that is, that the wives of alcoholics are not unique (p. 130)."

Concurrent Group Therapy

The second major emphasis of the literature has as its line of demarcation the study of Gliedman, et al. (1956). This work, which is given a lengthy review, since it is the first of its kind, reported improvement on a number of measures besides drinking behavior and is the report most closely resembling this study. Gleidman's project was limited to married male out-patient alcoholics whose wives would participate in concurrent but separately conducted discussion meetings. Of 45 couples contacted, only nine accepted treatment. The nine patients and their wives were evaluated before and after treatment by four measures: a drinking checklist, a symptom checking, an adjective checklist, and a social ineffectiveness scale.

The therapeutic orientation was analytic in a limited sense. The two 1 1/2-hour sessions per week for the alcoholic and the one 1 1/2 hour session for the spouse were somewhat structured, although no prearranged topics were employed. The patients attendance ranged from 4 to 26 meetings; 4 attended 20 or more sessions. Two patients dropped out. The attendance of the wives ranged from 1 - 15 meetings; 4 attended 12 or more sessions. One wife dropped out of the program. A description of the general characteristics of the husbands and wives and of their marriages was provided.

Despite the small patient sample, the study is important in the development of family techniques of alcoholism. Although the specific results were equivocal (leaning towards but not significant improvement in most of the patients on the four measures), by including wives this study greatly expanded the scope of appropriate outcome variables which successful treatment is to be judged. Secondly, the concurrent treatment has since led to an examination of marital satisfaction and marital interactional behavior as target criteria for therapeutic change.

Gliedman and associates found the greatest changes to be in the areas of satisfaction of patient and wife with each other

and personal acceptance. Fewer though, important changes took place in drinking behavior, and the least change occurred in social ineffectiveness.

In reviewing the study several points come to mind. On the positive side Gliedman adequately described his subjects and measures. However, he did not do as well in enunciating his treatment. He acknowledges the small sample size and twice cautions the reader to be careful in interpreting the results. Unfortunately, he did not use a control group, nor follow-up on his sample. Either would have strengthened his findings.

The reports of Macdonald (1958), Ingersheimer (1959), Prixley and Stiefel (1963) and Ewing et al. (1961) all share the common weakness of being a descriptive study. All four are further characterized by vague treatment descriptions, low attendance, and no empirical results. Ingersheimer's group ran for five months, Ewing's was open-ended, while the other two were one year in duration. Even acknowledging these glaring weaknesses, it is important to note all of these reports concluded that group therapy for wives is an effective and worthwhile adjunct to the treatment of many alcoholic patients. Additionally, Ewing, et al. provided very sage advance when they noted a

wife's cooperation with a treatment program for her husband cannot be taken for granted.

A different experience was recorded by Pattison, Courlas, Patti, Mann, and Muller (1965). They attempted to get wives more involved, develop a more efficient diagnostic process, provide therapy for the wives, and facilitate treatment for the alcoholic. The patient and their wives were mostly lower middle class southern black and Applachian whites referred from the municipal court and social agencies of Cincinnati, Ohio. The experiment consisted of a series of one-hour classes lasting two to six weeks during an 18-month period. Eighty wives constituting 40% of those wives whose husbands were in treatment participated. Most of the wives attended three or fewer classes and the majority did not return after the first visit.

Descriptive analysis of both spouse's responses indicated that the marital relationship was more crucial than either the attitude or character of the spouses in determining the response to treatment programs. Involvement of the wife frequently provoked antagonism in the husband. On the other side the clinic's attitude toward alcoholism as an illness was unpalatable to some wives because it provoked guilt and thereby denied their

social justification for anger. This finding is important because it is contrary to the popular opinion of the positive value of treatment of wives.

Smith's (1969) report of a follow-up study again returns the reader to the usual finding of the value of spouse treatment. Three variables -- patient's social stability, treatment outcome, and group attendance of the wife were considered, and their relationship to each other were tested statistically.

A therapeutic group was started for the wives of the in-patient alcoholics. The group met once a week for one and a half hours. The setting was informal and directive in its approach. Although Smith stated pressure was brought on non-attending wives, the average six-month attendance was 7 wives with the number varying from three to thirteen out of fifteen. It was found in 22 of 23 marriages (includes 8 non-attenders) followed at least 16 months after discharge from a combined inpatient-outpatient program, social stability in the patient's life and the wife's attendance at a spouse's meeting were found to be related to a favorable treatment outcome. The first two variables were not related.

A behavior-modification training program for wives of alcoholics is described by Cheek, Franks, Laucius and Burtle (1971). They contacted 162 wives of alcoholics of which only 24 participated and only 3 participants attended 5 or more meetings. The two-step program aimed first to teach the participants techniques such as reciprocal inhibition to help them become less disturbed in tension-arousing situations. Second, the women were shown how to apply behavorial principles and operant-conditioning techniques to effect changes in their interaction with their husbands.

The authors stated their level of success was of a relatively modest change in the alcoholic's attitudes and behavior and improved communications between the alcoholic and his wife. They admit the broad nature of the target behavior and the irregular attendance were primary problems that were not overcome. Still, the authors commented: "... Eventually, such programs could and should, be integrated into total behavioral remediation programs for alcoholics. The present report is offered as a first and exploratory stage toward this ultimate goal (p. 460)."

Cheek, et al. (1971) conducted an ambitious undertaking that seems incongruent with the generally more limited goals of behavorial-modification research. This was coupled with the usual low attendance of the spouse in alcoholic rehab programs. Thus the experiment had two critical faults. Nonetheless, it is one of only two behavorial oriented spouse programs reported in the literature and the authors did acknowledge the problems and suggested methods to prevent future errors in such research.

Estes and Hanson (1976) conducted a therapy group for women whose alcoholic husbands had recently become sober. Their clients were 10 women who were all actively involved in Al-Anon, but wanted additional help with the adjustment to their husband's sobriety. The women were white, middle class, and ranged in age from thirty-one to sixty. All had been married at least ten years and two members had been married more than 30 years.

Through an analysis of process recordings, the authors were able to identify five major problem areas. They are: (1) reinstatement of the husband into family roles; (2) difficulties surrounding communication; (3) affective responses of the wife; (4) disruptive traits and behaviors of the husband; and

(5) handling situations involving alcohol or alcohol-related problems.

In the group therapy, didactic, experimental and role modeling approaches were utilized, with major emphasis on the promotion of congruent communication. The authors concluded that group therapy focusing on the release of buried feelings was an effective means of hastening the readjustment of the family to the newly-sober alcoholic member.

Unfortunately, the authors did not explain how they came to that conclusion nor did they use objective tests to verify it. Other problems with the study were its lack of specification of length and its one-time small number research effort. However, the article has merit in that Estes and Hanson have delineated an area that seems to warrant more inquiry.

The above listed research findings have been largely enthusiastic about the concurrent group treatment technique. The emphasis was on the effectiveness of the technique as an adjunct to the treatment of the alcoholic. Additionally, the wives were reported to be in therapy for their own needs. Whatever the reason, aid to the wife has been demonstrated to bring therapeutic benefit to the alcoholic.

Conjoint Family Therapy

Consistent with the above verdicts praising the value of therapeutic assistance to the spouse of the alcoholic is the finding that the type of interaction does not seem to matter (Steinglass, 1977). The researchers of the late sixties and the seventies have studied conjoint family therapy, a technique involving multiple couples or families in a group format. These clinical reports, as those for concurrent therapy, have demonstrated promise.

Burton and Kaplan (1968a, 1968b) compared two ways of treating couples -- conjointly versus seeing the partner individually. They worked with an outpatient population of 48 couples and compared them to the 127 males and females who received individual treatment. Both groups were matched on age, education, income, and length of marriage. No significant differences were noted. Groups met weekly for an hour and a half. Attendance of the couples ranged from one to 44 sessions. Counseling focused on interpersonal relations, specifically the interaction between husband and wife. The two groups responded to a 54 item questionnaire, administered by the two counselors who had worked with the clients and two

additional interviewers. Success was defined as an improved marriage and a reduction in drinking.

In these couples who were being followed from 3 - 14 years after initial treatment, conjoint therapy generally produced better results. However, it is noteworthy that the rate of refusal to participate in the follow-up interviews among those who had group counseling was substantially lower than among those who had individual counseling. This leaves one wondering whether the results are therefore skewed by this bias.

In 1970 Esser published an article entitled "Conjoint Family Therapy with Alcoholics -- A New Approach". In it he describes in generalities the purpose of such a treatment approach. Additionally, he provides three extended case histories but neglects to specify the therapy used.

A study by Meeks and Kelly (1970) which evaluated the efficacy of family therapy techniques introduced during the recovery phase of treatment is called by Steinglass the most representative and influential of the clinical studies of conjoint family therapy. Meeks and Kelly adhered firmly to the theoretical orientation of the family therapist and applied the techniques developed by Virginia Satir. In their study, conjoint

family therapy was begun following an intensive 7-week day treatment program for the alcoholic patient. During this time, the family members were seen separately. However, from the beginning of the after-care phase, the alcoholic member was never seen apart from his or her family.

Treatment evaluation included the drinking pattern of the patients, but focused more on issues of improved family interactions. Meeks and Keely realized their very small sample (five) demanded a replication of the study under experimental conditions. Besides suggesting this, they concluded, "Family therapy can help the alcoholic by helping the entire family openly *confront* and *deal with their problems (p. 412)*." Thus, it comes as no surprise to find they made a recommendation that children be included in the treatment program.

Corder, et al. (1972) described the research program developed at the Alcoholic Rehabilitation Center in Butner, North Carolina. It contrasted a traditional four-week in-patient set-up with one designed to involve the patient's wife in an intensive four-day session. In both groups of 20, the average age was 43, income levels were $6,000, and educational level, ninth grade. The control group participated in the regular four-week program.

The experimental patients followed the regular program for three weeks. In this group for the last four days both the husband and wife attended the daily treatment program of (1) two 5-couple group therapy sessions, (2) analysis of videotape sessions, (3) didactic sessions, (4) group discussions of the basic concepts of transactional analysis, (5) talks with a recreational staff member designed to promote joint husband and wife ventures, (6) AA and Al-Anon meetings, (7) meetings with representatives of out-patient services, and (8) homework assignment for discussion during free time.

After six months, the patients were interviewed either personally or by telephone and validity of the answers checked against outside sources. Corder, et al. found that 8 of 19 pilot patients were drinking, compared with 17 of 20 control patients. Another significant finding was that more of the experimental group was attending some form of follow-up and fewer were unemployed. The primary fault of this report lies in the sketchy outline of its program description and results, thus making it difficult to replicate.

Cadogan (1973) extended the work of his predecessors by presenting the first controlled study of multiple-couples group therapy in alcoholism treatment. Forty, all-volunteer, subjects

were randomly assigned to either an immediate treatment group or a waiting list (control group). Both proved to be comparable in age, socioeconomic status, severity of alcoholism, and involvement with AA. The treatment group consisted of open-ended multiple-couple group sessions for 90 minutes each week. Therapy primarily focused on feeling expression, improvement in communication and problem solving through discussions. The average group was composed of five couples and dropouts were replaced by new recruits.

Six months after inpatient discharge, all the participants were sent questionnaires to assess the effectiveness of treatment or abstinence. The questionnaire was designed to indicate the extent to which alcohol remained a problem and categorized drinking behavior on a four-part continuum ranging from no drinking to no change in drinking. The difference in drinking between the control and the therapy groups was significant at the .05 level indicating treatment effectively influenced the development of abstinence. There was no significant difference between the two groups on the communication inventory. Cadogan also found that relapses tended to occur within the first three months following hospital discharge. He reasonably suggested generalization be restricted to the patient

population used in the study, at least until further research validated his findings.

Four behavioral approaches were compared by Hedberg and Campbell (1974). Forty-nine alcoholic individuals were involved in a treatment program designed to compare the therapeutic efficacy of (1) Behavorial family counseling, (2) Systematic desentization, (3) Covert sensitization, and (4) Shock presentation program. Each patient's therapy regime adhered to a standardized sequence of treatment sessions in an out-patient setting over a one-year period. Additionally, each client established for himself the treatment goal of either controlled drinking or complete abstinence.

Goal attainment and improvement was determined from the information obtained in an interview with the patient, the patient's spouse, and the patient's therapist. Behavorial family counseling yielded a goal-attainment of 74% with an additional 13% giving evidence of much improvement. Systematic desensitization yielded 67%; covert sensitization yielded 40%, and only 1 of 4 patients showed improvements in the electric shock treatment condition. The authors concluded the results of the research lend support to behavior therapy as one of the more promising treatment approaches for

alcoholism. This study was unique in that it alone let the client choose his goal of abstinence or controlled drinking.

Wright (1975) conducted a systematic review of the case files of 227 married couples seen by counselors at two agencies in North Dakota. Analysis of the relationship between the wive's treatment and their husband's drinking status revealed:

> " ... When wives had combined outpatient treatment with other treatments, their husbands may be either drinking or abstinent; when wives had combined active Al-Anon membership with other treatments, their husbands were more likely to be abstinent; when wives had combined treatment at their husband's inpatient centers with other treatments, their husbands were more likely to be abstinent; when wives had combined post-treatment with other treatments, their husbands may either be drinking or abstinent; and the more treatments the wives had received, the more likely their husbands were to be abstinent and conversely, the fewer treatments they had received, the more likely their husbands were to be drinking (p. ix)."

On the basis of this finding, Wright concluded alcoholism counselors should encourage the wife of an alcoholic to participate actively in her husband's treatment.

One of the biggest proponents of conjoint family therapy is Dr. Vernon E. Johnson who founded the Johnson Institute.

His book, I'll Quit Tomorrow (1973), is a practical guide to his approach, an approach he claims works in seven out of ten cases. Although his work is widely respected and initiated, there has not been any concrete data published by his Institute.

Others such as Bruton (1962) and Paolino and McCrady (1976) have also praised conjoint family therapy. Unfortunately, like the literature in concurrent group therapy that of conjoint therapy tends to be mostly descriptive. The few clinical studies are characterized by small samples and are not validated by other independent researchers. Still, it is very hard not to be impressed by the overwhelmingly positive first impressions of the researchers. Overall, both the impressions and the results of the limited systematic studies have pointed to a relationship between the alcoholic's current drinking status and the involvement of his wife in the treatment process.

Discussion and Summary

The review of the literature offered a sense of guarded optimism about the use of spouse therapy in the treatment of alcoholism. Consistent with family therapy's theoretical position, alcoholism is seen as both cause and consequence of

the family's relationship difficulties. Whether or not the spouse has a normal personality pattern, the fact the woman is involved in her husband's treatment for alcoholism has been demonstrated to have a significant effect on his recovery (Finlay, 1974). Furthermore, it is unclear what form of spouse counseling/ family treatment works best. Of the 19 therapeutic studies reviewed, 10 cited their primary focus was counseling, five favored a combined education/counseling approach. Three were too vague to classify, and one was strictly educationally-centered. Steinglass (1977) in his review stated that no single family therapy technique has gained a dominant position or demonstrated superior credentials regarding treatment of alcoholic families (p. 292). Janzen echoes this view when he states family therapy can only be defined as treatment which includes one or more family members in addition to the alcoholic. Individual, conjoint, and group treatment are all used (p. 127).

Such findings influenced this author's design. As the surveyed literature indicates, there is no best treatment. There was not even a study which compared concurrent and conjoint group therapies. This may be due to treatment settings.

Close inspection of concurrent therapy reports revealed eight of nine were conducted in an outpatient setting and the ninth was an outpatient service for the wives of inpatient alcoholics. In contrast, the conjoint group studies were split, five being outpatient and five being reports on inpatient facilities. Therefore, to be consistent with the reported model used in outpatient settings, this research used concurrent group therapy.

Another implication derived from the family therapy literature and used in this study is the expansion of the treatment goal to include more than just abstinence. Among varying topic evaluations, Meeks, Kelly, Gliedman, et al. and Cadogan all evaluated family interaction and drinking patterns. This study followed their lead.

In summary, a primary deficit of the past work is the lack of randomized experimental research design which utilizes a control group. Therefore, by incorporating such a plan, this study, designed to take a careful look at the effects of spouse involvement on the treatment outcomes of the problem drinker, should advance our knowledge of the efficacy of spouse therapy.

Chapter 3

METHODOLOGY

The chapter is organized into the following sections: (a) Sample, (b) Instrumentation, (c) Experimental design, (d) Statistical hypothesis, and (e) Analysis.

Sample

The sample was drawn from the married population either enrolled or in an inactive (no contract) follow-on phase in the Langley Air Force Base Alcohol Rehabilitation Program. Thirty-nine couples were contacted and of these 33 said they would participate but two never showed at group and two controls did not do any paperwork. A demographic analysis is provided in Appendix A.

Instrumentation

The instruments used were chosen in order to provide a broader scope of outcome data than the traditional abstinence goal common in alcoholism research. These instruments are discussed in alphabetical order. Information on validity, reliability, and other related test data is contained in Appendix B.

A Martial Communication Inventory (MCI)

The MCI was developed to accumulate evidence regarding the nature, characteristics, and patterns of communication in couples who appear to have a satisfying marriage as contrasted to those whose system of communication seems faulty and impaired. The 46 item inventory was formulated from a review of the literature, suggestions from social workers and marriage counselors, and the author's own experiences. There are two forms, one for the husband and one for the wife. Higher scores indicate an advanced level of and more successful marital communication.

Bienvenu (1969, 1970) states the MCI was designed primarily to help counselors assess the marital relationship for use in counseling. Clinically he believes the MCI can be used as a part of a battery design to measure the degree of health or disturbed communication in a marriage.

In a doctorial dissertation entitled "A Study of Communication and Empathy in Marital Adjustment" Elliott (1975) found the MCI to have a Guttman reliability coefficient of .96. This is important in that her research subjects were similar to the present study. Demographic data for the Marital

Adjustment Study were husbands mean age to be 36.4 years, while the wife's age was 34.1 years. The average duration of the marriages was 11.6 years and one-fifth of the 105 couples had at least 1 - 3 years of college.

Michigan Alcoholism Screening Test (MAST)

The MAST was devised to provide a consistent, quantifiable, structured interview instrument for the detection of alcoholism that could be rapidly administered by both paraprofessional and professional personnel. The MAST consists of 25 questions, culled from other investigations in surveys of alcoholism (Selzer, 1971). Scores of 0 - 3 are indicative of no alcoholism, a score of 4 is questionable; while scores of 5+ suggest alcoholism is present.

Two studies which relate to this author's use of the MAST are briefly reviewed. Favazza and Pires (1974) reported the results of the MAST given to a young military population. They administered the test to four groups of active duty enlisted Navy men: 75 hospitalized on a general medical ward; 75 hospitalized orthopedic patients; 75 hospital corpsmen; and 33 patients in an alcoholism treatment ward. They compared their findings to Department of Defense estimates and found the results to be

consistent. They therefore concluded the MAST can be used to identify alcoholism in a military population.

Morse and Swenson (1975) gave a self-administered expanded version of the MAST to 50 hospitalized alcoholics and their spouses. Their purpose was to verify the reliability of spouse information on the drinking problems of their marriage partner. It was found that the diagnosis of alcoholism could be made from patient information alone in 84% of the cases and from spouse information alone in 90% of the answers provided. Morse and Swenson concluded the spouse may be a more reliable source of information about drinking problems than the alcoholic individual.

Mooney Problem Checklist (MPC) - Adult Form

The essential purpose of the MPC is to help individuals express their personal problem. The client first reads through the checklist underlining the problems which are of concern. Second, the client circles those of most concern, and then finishes with a summary in his/her own words. The Adult form, like the other forms is printed on a six-page folder in a way that provides for ease of marking by the individual and simplifies the summarization by the counselor.

The Adult form was developed for use with late adolescents and adults who are principally of nonstudent status. The items were developed from original problem surveys, review of the literature and suggestions from experienced counselors.

Pittman Drinking Scale

Using the Guttman scaling technique, a drinking scale is applied to the drinking levels reported by a group of alcoholics after treatment. Five questions are asked. These questions measure the frequency with which a person drank; the amount of drinking; work or job loss from drinking; whether treatment was required for his drinking; and whether there had been periods during which the person had not drunk, and if so, how long these periods lasted. Although detailed answers are given to each of these questions, for scaling purposes, the answer categories are dichotomized so that each case is given a score of "0" or "1" with the higher score indicating a greater amount of drinking (Boggs, 1967, p. 183).

The wording of the Pittman Drinking Scale has been changed to more accurately describe the conditions of this study. The scales to be used are presented in Appendix B.

Design

The first step in obtaining the sample population was a screening of the case files of all rehabilities. Those clients who were currently separated or divorced were excluded from further consideration. Additionally, five subjects had to be excluded because their wife did not speak sufficient English. (All five women were native Orientals who had married their husband overseas and were confirmed by a neutral source not to have a standard grasp of the English language.) This left 40 eligible couples. Since the husband was the traditional client, the purpose and procedures of the study were first explained to him and his permission was secured prior to contact with the spouse. Only one husband denied the researcher permission to contact his wife. The author then contacted the other 39 wives, of which 33 said they would participate.

The spouses, excluding controls, and the facilitators were randomly assigned to a group. The control group was assembled when four wives had to decline to participate because of schedule conflicts, one woman's husband said she could not attend a group, and five wives decided against group work, but all agreed to participate as controls and therefore complete the assessment package.

Each group was 10 weeks in duration led by an agency certified paraprofessional alcohol counselor (qualifications are listed in Appendix C). The groups were composed of both spouses whose husbands are in the program and those who have completed it. However, when practical, these two categories will be treated separately in statistical analysis.

The education group was conducted as a seminar. Each session focused on topics such as: Physiology of alcohol; Alcohol and the law; the effects of alcohol on the family, Alcohol and family finances; Alcoholics Anonymous and Al-Anon; and Intervention. The topics were covered through the use of films, i.e., "The Summer We Moved to Elm Street" (Family Issues); "I'll Quit Tomorrow" (Intervention), books and pamphlets, class exercises, homework assignments, or a combination of all of these.

The counseling group was led by a paraprofessional who is trained as and is a self-professed reality-therapist. He used group exercises such as the Johari Window, The Feeling Wheel, and others culled from the Pfeiffer and Jones series (1969 - 1977). The focus of the group was on the personal growth of the group member.

(A detailed outline of each group's weekly focus is provided in Appendix D).

A visual conception of the experimental design is presented below:

X_1 O_1

Education Group

X_2 O_2

Counseling Group

O_3

Control Group

		Treatment	
		Education	Counseling
R	Concurrent Wives	7	6
	Wives of Husbands Completing	5	5

Controls - 8 Concurrent and 2 Completed.

Hypotheses and Analysis

This research has postulated a number of hypotheses. To aid the reader each hypothesis is first listed. Then the research hypotheses are symbolically presented as null and as their directional alternates. Additionally, the statistical test that was used is given.

Hypothesis 1

Hypothesis 1 is alcoholics whose wives entered treatment showed a greater reduction than the control group in alcohol consumption as measured by the Pittman Drinking Scale. In relation to research Hypothesis 1, the following statistical hypotheses were tested:

H_0: The three treatment means are equal, that is

$$0_1 = 0_2 = 0_3$$

H_1: There is no difference in treatment means but both are greater than the control, this is,

$$(0_1 = 0_2) > 0_3$$

The statistical tests of research Hypothesis 1 and the related null hypothesis were Chi-Square.

Hypothesis 2

Hypothesis 2 states both treatments resulted in the alcoholic having fewer alcohol related incidents than the controls. In relation to research Hypothesis 2, the following statistical hypotheses were tested:

H_0: The three treatment means are equal, that is,

$$0_1 = 0_2 = 0_3$$

H_1: There is no difference in treatment means, but both result in fewer alcohol related incidents than the control, that is,

$$(0_1 = 0_2) < 0_3$$

The statistical tests of research Hypothesis 2 and the related null hypothesis were Chi-Square.

Hypothesis 3

Hypothesis 3 is both treatments resulted in a more favorable prognosis of family interaction as measured by fewer number of problems checked on the Mooney Problem Check List and an elevated score on the Marital Communication Inventory than the controls. In relation to research Hypothesis 3, the following statistical hypotheses were tested:

H_0: The three treatment means are equal, that is,

$$0_1 = 0_2 = 0_3$$

H_1: There is no difference in treatment means, but both result in a lesser number of problems, than the control, that is,

$$(0_1 = 0_2) < 0_3$$

Ha_0: The three treatment means are equal, that is

$$0_1 = 0_2 = 0_3$$

Ha_1: There is no difference between in treatment means, but both result in a higher score than the control, that is,

$$(0_1 = 0_2) > 0_3$$

The statistical tests of research Hypothesis 3 and the related null hypothesis were Analysis of Variance.

Hypothesis 4

Hypothesis 4 states both treatments resulted in the alcoholics showing a more favorable prognosis than the control group in duty performance as measured by attendance at therapy sessions and supervisors' evaluations. In relation to research Hypothesis 4, the following statistical hypothesis were tested.

H_0: The three treatments are equal, that is,

$$0_1 = 0_2 = 0_3$$

H_1: There is no difference in treatment means, but both result in greater participation than the control, that is,

$$(O_1 = O_2) > O_3$$

Ha_0: The three treatments are equal, that is,

$$O_1 = O_2 = O_3$$

Ha_1: There is no difference in treatment means, but both result in a higher rating than the control, that is,

$$(O_1 = O_2) > O_3$$

The statistical tests of research Hypothesis 4 and the related null hypothesis were Analysis of Variance.

Hypothesis 5

In Hypothesis 5 there is no difference in classification of the problem drinkers and the wives in treatment of their ratings of the alcoholic on the MAST. In relation to research Hypothesis 5, the following statistical hypotheses were tested:

H_0: The three treatments are equal, that is,

$$O_1 = O_2 = O_3$$

H_1: There is no difference in rating of the treatment means, but all result in a more accurate agreement than the controls, that is,

$$(O_1 = O_2) > O_3$$

The statistical test of research Hypothesis 5 and the

related null hypothesis were Chi-Square.

Hypothesis 6.

Hypothesis 6 states there is no significant difference in the treatment outcomes of problem drinkers whose spouse participated in the education group and those whose spouse treatment was the counseling group. In relation to research Hypothesis 6, the following statistical hypotheses were tested:

H_0: The two treatment methods are equal, that is,

$$O_1 = O_2$$

H_1: The two treatment methods are not equal, that is,

$$O_1 = O_2$$

The statistical tests of research Hypothesis 6 and the related null hypothesis were Analysis of Variance or Chi-Square.

Hypothesis 7

Hypothesis 7 states there is no significant difference in the treatment outcomes of problem drinkers whose spouse participates in concurrent therapy and those whose spouse treatment was after the problem drinker completes his active program. In relation to research Hypothesis 7, the following statistical hypotheses were tested:

H_0: The two treatment methods are equal, that is,

$$O_1 = O_2$$

H_1: The two treatment methods are not equal, that is,

$$O_1 = O_2$$

The statistical tests of research Hypothesis and the related null hypothesis were Analysis of Variance or Chi-Square,

Levels of Significance

Levels of significance for testing all hypotheses were set at .05. The corresponding confidence levels were .95.

Chapter 4

ANALYSIS AND PRESENTATION OF THE DATA

The hypotheses that were formulated for this research study involved three treatment groups. These groups were an Education group, a Counseling group, and the Control group. The results of this investigation are presented separately by hypothesis in this chapter. Statistical findings are reviewed and interpreted for each hypothesis.

Hypothesis 1.

Hypothesis 1 was alcoholics whose wives entered treatment showed a greater reduction than the control group in alcohol consumption as measured by the Pittman Drinking Scale. Tests of Hypothesis 1 were conducted on the null hypothesis: that is, the three groups were equal in amount of alcohol reported consumed regardless of treatment conditions. The statistical test was Chi-Square analysis of a 3 X 6 contingency table of frequencies of responses to the Pittman Scale. The data in Table 1 shows the Chi-Square value to be 10.184 with 10 degrees of freedom (DF) which was not significant at the .05 level. (However, a warning that the table is so spare that Chi-Square may not be a valid test was given. This is so, because

TABLE 1

CHI-Square Analysis of the Pittman-Drinking Scale by Treatment Groups Including the Controls

Pittman	Group			
Frequency Cell CH12 Percent	1	2	3	Total
0	1 0.9 3.03	3 0.2 9.09	3 0.4 9.09	7 21.21
1	0 0.4 0.00	0 0.3 0.00	1 1.6 3.03	1 3.03
2	5 0.3 15.15	2 0.8 6.06	4 0.1 12.12	11 33.33
3	4 0.4 12.12	2 0.2 6.06	2 0.1 6.06	8 24.24
4	2 0.0 6.06	3 1.1 9.09	0 1.5 0.00	5 15.15
5	0 0.4 0.00	1 1.3 3.03	0 0.3 0.00	1 3.03
TOTAL	12 36.36	11 33.33	10 33.30	33 100.00

Statistics for 2-Way Tables

Warning: Table is so sparse that CHI-Square may not be a valid test.

CHI-Square	10.184	DF = 10	PROB = 0.425
PHI	0.556		
Contingency Coefficient	0.486		
Cramer's V	0.393		
Likelihood Ratio CHI-Square	12.105	DF = 10	PROB = 0.2781

Chi-Square is generally considered a fair test only when the minimum number in each cell is five. Thus, the sample size, itself, is a limiting factor). Therefore, the null hypothesis was accepted.

Hypothesis 2

The second hypothesis was both treatments resulted in the alcoholic having fewer alcohol related incidents than the controls. Its corresponding null hypothesis was: the three groups, regardless of treatment, had the same frequency of alcohol related incidents. The statistical test run on the null hypothesis was a Chi-Square analysis of a 3 X 4 contingency table of frequencies of alcohol related incidents. Results are presented in Table 2. The Chi-Square was 4,427 with 6 degrees of freedom which was not significant. (A warning of the statistical test was provided.) Thus, the null hypothesis was accepted.

Hypothesis 3

Hypothesis 3 was both treatments resulted in a more favorable prognosis of family interaction than the controls as measured by fewer number of problems checked on the Mooney

TABLE 2

CHI-Square Analysis of Alcohol Related Incidents by Treatment Groups Including the Controls

Incident	Group			
Frequency Cell CHI2 Percent	1	2	3	Total
0	8 0.1 24.24	5 0.4 15.15	7 0.1 21.21	20 60.61
1	1 0.6 3.03	3 0.5 9.09	2 0.0 6.06	6 18.18
2	2 0.0 6.06	3 0.5 9.09	1 0.4 3.03	6 18.18
3	1 1.1 3.03	0 0.3 0.00	0 0.3 0.00	1 3.03
TOTAL	12 36.36	11 33.33	10 30.30	33 100.00

Statistics for 2-Way Tables

Warning: Table is so sparse that CHI-Square may not be a valid test.

CHI-Square	4.427	DF = 6	PROB = 0.6191
PHI	0.366		
Contingency Coefficient	0.344		
Cramer's V	0.259		
Likelihood Ratio Chi-Square	4.832	DF = 6	PROB = 0.5656

Problem Check List and an elevated score on the Marital Communication Inventory. Tests of Hypothesis 3 were conducted on the null hypothesis, the first of which was: the three groups are equal in the amount of problems checked on the Mooney Problem Check List (MPC). The statistical test was a one-way Analysis of Variance on the frequency of responses on the MPC. Table 3 shows the F value was 1,42 with 2, 32 degrees of freedom which was not significant. Once again the null hypothesis was accepted.

The second null hypothesis tested was: all treatments are equal and each will yield an elevated score of the Marital Communication Inventory (MCI). The results of the Analysis of Variance are presented in Table 4. The F value was 3,44 with 2, 32 degrees of freedom which is significant at the ,05 level. However, rather than immediately reject the null, further tests were run. Tables 5 and 6 provide the statistical data of the MCI for treatment groups excluding the counseling group and then excluding the education group. The F values were 6, 04 (1, 23 DF) and 5, 47 (1, 21) respectively, both of which are significant. One further test remained; the simple mean score of the three groups was computed. The means were: 79, 33 for the

TABLE 3

Analysis of Variance of the Mooney Problem Check List for Treatment Groups Including the Controls

Dependent Variable: Mooney Problem Check List

Mean: 37.7429

SD: 27.2943

Source	DF	Sum of Squares	Mean Square	F Value	Probability >F
Model	2	2117.3614	1058.6807	1.42	0.2563
Error	32	23839.3244	744.9789		
Corrected Total	34	25956.6858			

TABLE 4

Analysis of Variance of the Marital Communication Inventory for Treatment Groups Including the Controls

Dependent Variable: Marital Communication Inventory

Mean: 85.6286

SD: 22.6756

Source	DF	Sum of Squares	Mean Square	F Value	Probability >F
Model	2	3538.3278	1769.1639	3.44	0.04433*
Error	32	16453.8436	514.1826		
Corrected Total	34				

* $p < .05$

TABLE 5

Analysis of Variance of the Marital Communication Inventory for Treatment Groups Excluding the Counseling Group

Dependent Variable: Marital Communication Inventory

Mean: 89.3600

SD: 19.5912

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	2320.0164	2320.0164	6.04	0.0219*
Error	23	8827.7436	383.8149		
Corrected Total	24	11147.7600			

* $p < .05$

TABLE 6

Analysis of Variance of the Marital Communication Inventory for Treatment Groups Excluding the Education Group

Dependent Variable: Marital Communication Variable

Mean: 88.9130

SD: 22.6875

Source	DF	Sum of Squares	Mean Square	F Value	Probability >F
Model	1	2814.6492	2814.6492	5.47	0.0293*
Error	21	10809.1769	514.7227		
Corrected Total	22	13623.8261			

* $p < .05$

education group; 76.30 of the counseling group; and 98.61 for the control group. Since the treatments are not equal, the null hypothesis was rejected. But Hypothesis 3 was also rejected, because the treatments did not result in a more favorable prognosis of family interaction than the controls as measured by an elevated score on the MCI. Instead the scores were deflated. (Hypothesis 6 compares the two types of treatment groups.)

Hypothesis 4

The fourth hypothesis was both treatments resulted in the alcoholics showing a more favorable prognosis than the control group in duty performance as measured by Attendance at Therapy and Supervisor's Performance Evaluations. The corresponding null hypothesis for both variables was: the three treatments are equal. Each hypothesis was examined separately.

A one-way Analysis of Variance was run on the dependent variable, Attendance at Therapy. (Attendance at Therapy equals the ratio of Actual/Required Attendance.) The F value presented in Table 7 was 3.01 (2, 21 DF) which was not

TABLE 7

Analysis of Variance of the Attendance at Therapy for Treatment Groups Including the Controls

Dependent Variable: Attendance at Therapy

Mean: 0.9404

SD: 0.0911

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	2	0.0500	0.0250	3.01	0.0707
Error	21	0.1742	0.0083		
Corrected Total	23	0.2242			

significant but gave a probability factor of .0707 - close enough to warrant further scrutiny. Therefore, a one-way Analysis of Variance was run on the treatment groups excluding the counseling group (Table 8) and excluding the education group (Table 9). The F value of the first was 2.85 with 1,14 degrees of freedom which was not significant. The F value comparing the counseling and the control groups was 5.72 with 1,13 degrees of freedom which translates to a probability of .0326 which is significant at the .05 level. Since the treatments are not equal, the null hypothesis was rejected. But the fourth hypothesis was also rejected because both treatments did not result in a more favorable prognosis than the control group in duty performance as measured by Attendance at Therapy.

The dependent variable Supervisor's Performance Evaluation was examined in Table 10. A one-way Analysis of Variance yielded an F value of .77 with 2,23 degrees of freedom which was not significant. Thus, the null hypothesis was accepted.

Hypothesis 5

Hypothesis 5 was there is no difference in classification of the problem drinkers and their wives of their ratings of

TABLE 8

Analysis of Variance of the Attendance at Therapy For Treatment Groups Excluding the Counseling Group

Dependent Variable: Attendance at Therapy

Mean: 0.9684

SD: 0.0660

Source	DF	Sum of Squares	Mean Square	F Value	Probability >F
Model	1	0.0124	0.0124	2.85	0.1134
Error	14	0.0609	0.0044		
Corrected Total	15	0.0733			

TABLE 9

Analysis of Variance of the Attendance at Therapy for Treatment Groups Excluding the Education Group

Dependent Variable: Attendance at Therapy

Mean: 0.9384

SD: 0.0934

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	0.0498	0.0498	5.72	0.0326 *
Error	13	0.1133	0.0087		
Corrected Total	14	0.1631			

* $p < .05$

TABLE 10

Analysis of Variance of the Supervisor's Performance Evaluation for Treatment Groups Including the Controls

Dependent Variable: Supervisor's Performance Evaluation

Mean: 4.9500

SD: 1.0035

Source	DF	Sum of Squares	Mean Square	F Value	Probability >F
Model	2	1.5458	0.7729	0.77	0.4757
Error	23	23.1592	1.0069		
Corrected Total	25	24.7050			

the alcoholic on the Michigan Alcoholism Screening Test (MAST). Tests of Hypothesis 5 were conducted on the null hypothesis which was: the three groups had the same classification of the problem drinker on the MAST. The statistical test was Chi-Square analysis of a 3 X 2 contingency table of frequencies of alcoholic responses to the MAST. The data in Table 11 shows the Chi-Square value to be .5706 with 2 degrees of freedom which was not significant. (A warning of the statistical test was provided.) The null hypothesis was accepted.

Hypothesis 6

The sixth hypothesis was there is no significant difference in the treatment outcomes of problem drinkers whose spouse participated in the education group and those whose spouse treatment was the counseling group. Its corresponding null hypothesis was: the two group treatments were equal. Results are presented in Tables 12 - 16.

A one-way Analysis of Variance was run on the dependent variables Supervisor's Performance Evaluations (Table 12), Mooney Problem Check List (Table 13), and the Marital Communication Inventory (Table 14). The F values and their

TABLE 11

CHI-Square Analysis of the MAST by Treatment Groups

Including the Controls

MAST	Group			Total
Frequency Cell CH12 Percent	1	2	3	
0	7 0.2 21.21	4 0.3 12.12	5 0.0 15.15	16 48.48
1	5 0.2 15.15	7 0.3 21.21	5 0.0 15.15	17 51.52
Total	12 36.36	11 33.33	10 30.30	33 100.00

Statistics for 2-Way Tables

Warning: Table is so sparse that CHI-Square may not be a valid test.

CHI-Square	1.122	DF = 2 PROB = 0.5706
PHI	0.184	
Contingency Coefficient	0.181	
Cramer's V	0.184	
Likelihood Ratio Chi-Square	1.133	DF = 2 PROB = 0.5674

TABLE 12

Analysis of Variance of the Supervisor's Performance Evaluation for Treatment Groups Excluding the Controls

Dependent Variable: Supervisor's Performance Evaluation

Mean: 4.9706

SD: 1.0718

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	1.5250	1.5250	1.33	0.2673
Error	15	17.2303	1.1487		
Corrected Total	16	18.7553			

TABLE 13

Analysis of Variance of the Mooney Problem Check List for Treatment Groups Excluding the Controls

Dependent Variable: Mooney Problem Check List

Mean: 43.3636

SD: 32.1255

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	246.0742	246.0742	0.24	0.6307
Error	20	20641.0167	1032.0508		
Control Total	21	20887.0909			

TABLE 14

Analysis of Variance of the Marital Communication Inventory for Treatment Groups Excluding the Controls

Dependent Variable: Marital Communication Inventory

Mean: 77.9545

SD: 25.7592

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	50.1879	50.1879	0.08	0.7861
Error	20	13270.7667	663.5383		
Corrected Total	21	13320.9545			

corresponding degrees of freedom were 1.33, 1,15; .24, 1,20, and .08, 1,20 respectively. No F value was significant. The null hypothesis on all three variables was accepted.

For the dependent variables, amount of alcohol consumed as reported on the Pittman Scales (Table 15) and the number of Alcohol Related Incidents (Table 16) a Chi-Square analysis was run on each. The Chi-Square value of the Pittman Scales was 4.117 with 4 degrees of freedom. The Chi-Square value of the Alcohol Incidents was 2.854 with 3 degrees of freedom. (A warning of the validity of the test was provided). Since neither value was significant, the null hypothesis, that the two group treatments were equal, was confirmed.

Hypothesis 7

Hypothesis 7 was there is no significant difference in the treatment outcomes of problem drinkers whose spouse participated in concurrent therapy and those whose spouse treatment was after the problem drinker completed his active program. Its corresponding null hypothesis was: the treatment methods were equal. Results are presented in Tables 17 - 21.

TABLE 15

CHI-Square Analysis of the Pittman Drinking Scale

by Treatment Groups Excluding Controls

Pittman	Group		Total
Frequency Cell CH12 Percent	1	2	
0	1 0.6 4.35	3 0.6 13.04	4 17.39
2	5 0.5 21.74	2 0.5 8.70	7 30.43
3	4 0.2 17.39	2 0.3 8.70	6 26.09
4	2 0.1 8.70	3 0.2 13.04	5 21.74
5	0 0.5 0.00	1 0.6 4.35	1 4.35
TOTAL	12 52.17	11 47.83	23 100.00

Statistics for 2-way tables

Warning: Table is so sparse that Chi-Square may not be a valid test.

CHI-Square	4.117	DF = 4 PROB = 0.3904
PHI	0.423	
Contingency Coefficient	0.390	
Cramer's V	0.423	
Likelihood Ratio Chi-Square	4.599	DF = 4 PROB = 0.3310

TABLE 16

CHI-Square Analysis of Alcohol Related Incidents by Treatment Groups Excluding the Controls

Incident	Group		
Frequency Cell CHI2 Percent	1	2	Total
0	8 0.2 34.78	5 0.2 21.74	13 56.52
1	1 0.6 4.35	3 0.6 13.04	4 17.39
2	2 0.1 8.70	3 0.2 13.04	5 21.74
3	1 0.4 4.35	0 0.5 0.00	1 4.35
TOTAL	12 52.17	11 47.83	23 100.00

Statistics for 2-Way Tables

Warning: Table is so sparse that CHI-Square may not be a valid test.

CHI-Square	2.854	DF = 3	PROB = 0.4147
PHI	0.352		
Contingency Coefficient	0.332		
Cramer's V	0.352		
Likelihood Ratio CHI-Square	3.289	DF = 3	PROB = 0.3491

TABLE 17

Analysis of Variance of the Supervisor's Performance Evaluation for Concurrent vs. Completed Therapy Groups

Dependent Variable: Supervisor's Performance Evaluation

Mean: 4.9500

SD: 0.9734

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	1.9663	1.9663	2.08	0.1626
Error	24	22.7388	0.9475		
Corrected Total	25	24.7051			

A one-way Analysis of Variance was run on the dependent variables Supervisor's Performance Evaluation (Table 17), Mooney Problem Check List (Table 18), and the Marital Communication Inventory (Table 19). The F values and their corresponding degrees of freedom were 2.08, 1,24; .13, 1,13; and .05, 1,13 respectively. No F value was significant, so the null hypothesis on all three variables was accepted.

For the dependent variables, amount of alcohol consumed as reported on the Pittman Scales (Table 20) and the number of Alcohol Related Incidents (Table 21), a Chi-Square analysis was run on each. The Chi-Square value of the Pittman Scale was 4.999 with 5 degrees of freedom. The Chi-Square value of the Alcohol Incidents was 1.098 with 3 degrees of freedom. (A warning of the validity of the test was provided.) Since neither value was significant, the null hypothesis, that the two group treatments were equal, was confirmed.

TABLE 18

Analysis of Variance of the Mooney Problem Check List for Concurrent vs. Completed Therapy Groups

Dependent Variable: Mooney Problem Check List

Mean: 37.6000

SD: 29.5455

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	115.4182	115.4182	0.13	0.7220
Error	13	11348.1818	872.9371		
Corrected Total	14	11463.6000			

TABLE 19

Analysis of Variance of the Marital Communication Inventory for Concurrent vs. Completed Therapy Groups

Dependent Variable: Marital Communication Inventory

Mean: 88.6667

SD: 23.4154

Source	DF	Sum of Squares	Mean Square	F Value	Probability > F
Model	1	29.6970	29.6970	0.05	0.8196
Error	13	7127.6364	548.2797		
Completed Total	14	7157.3334			

TABLE 20

CHI-Square Analysis of the Pittman Drinking Scale for Concurrent vs. Completed Therapy Groups

Pittman	Therapy		
Frequency Cell CHI2 Percent	1	2	Total
0	2 1.2 6.06	5 1.8 15.15	7 21.21
1	1 0.3 3.03	0 0.4 0.00	1 3.03
2	8 0.3 24.24	3 0.4 9.09	11 33.33
3	5 0.0 15.15	3 0.0 9.09	8 24.24
4	3 0.0 9.09	2 0.0 6.06	5 15.15
5	1 0.3 3.03	0 0.4 0.00	1 3.03
TOTAL	20 60.61	13 39.39	33 100.00

Statistics for 2-Way Tables

Warning: Table is so sprase that CHI-Square may not be a valid test.

CHI-Square	4.999	DF = 5	PROB = 0.4161
PHI	0.389		
Contingency Coefficient	0.363		
Cramer's V	0.389		
Likelihood Ratio Chi-Square	5.670	DF = 5	PROB = 0.3397

TABLE 21

CHI-Square Analysis of the Alcohol Related Incidents for Concurrent vs. Completed Therapy Groups

Incident	Therapy		
Frequency Cell CH12 Percent	1	2	Total
0	11 0.1 33.33	9 0.2 27.27	20 60.61
1	4 0.0 12.12	2 0.1 6.06	6 18.18
2	4 0.0 12.12	2 0.1 6.06	6 18.18
3	1 0.3 3.03	0 0.4 0.00	1 3.03
TOTAL	20 60.61	13 39.39	33 100.00

Statistics for 2-Way Tables

Warning: Table is so sparse that CHI-Square may not be a valid test.

CHI-Square	1.098	DF = 3	PROB = 0.7776
PHI	0.182		
Contingency Coefficient	0.179		
Cramer's V	0.182		
Likelihood Ratio Chi-Square	1.450	DF = 3	PROB = 0.6939

Summary

This chapter presented the analysis of data to test each hypothesis as stated in the first chapter. The statistical data relative to the hypothesis were presented in table form. After the null hypothesis was presented, the data were summarized, and the null hypothesis was either accepted or rejected based on the statistical treatment of the data.

The first hypothesis of this study was rejected. Subjects whose wives entered treatment did not show a greater reduction than the control group in alcohol consumption as measured by the Pittman Drinking Scale. Table 1 presented the Chi-Square value relative to the first hypothesis.

The second hypothesis was rejected. Neither treatment resulted in the alcoholic having fewer alcohol-related incidents than the controls. Table 2 presented the Chi-Square value relative to the second hypothesis.

The third hypothesis had two parts. Both were rejected. Neither treatment resulted in a more favorable prognosis of family interaction than the controls as measured by fewer number of problems checked on the Mooney Problem Check List and

an elevated score on the Marital Communication Inventory. However, both treatments resulted in a decreased score on the MCI. Table 3 presented the F value relative to the MPC. Tables 4 - 6 presented the F values relating to the MCI.

The fourth hypothesis was rejected because both treatments did not result in a more favorable prognosis than the control group in duty performance as measured by Attendance and Therapy and Supervisor's Performance Evaluation. However, the counseling group did show a more favorable prognosis but only for the Attendance at Therapy variable. Tables 7 - 10 presented the statistical data relative to the fourth hypothesis.

The fifth hypothesis was rejected. There was no difference in classification of the problem drinkers and the wives in treatment of their ratings of the alcoholic on the Michigan Alcoholism Screening Test. Table 11 presented the Chi-Square Analysis relative to the fifth hypothesis.

The sixth hypothesis was rejected. There was no significant difference in the treatment outcomes of problem drinkers whose spouse participated in the education group and those whose spouse treatment was the counseling group. Tables 12 - 16

presented the statistical data relative to the sixth hypothesis.

The seventh hypothesis was rejected. There was no significant difference in the treatment outcomes of problem drinkers whose spouse participated in concurrent therapy and those whose spouse treatment was after the problem drinker completed his active program. Tables 17 - 21 presented the statistical data relative to the seventh hypothesis.

Chapter 5

EXAMINATION OF THE RESULTS

This chapter includes a summary of the hypotheses and research questions, procedures, and findings of the study. Conclusions, implications, and recommendations for further research are also included.

Summary

The purpose of this study was to test the effects of spouse counseling on the treatment outcomes of the alcoholic. The experimental field study was designed to answer the question: Which, if either, of two treatment modes: a) an education focused group; or b) a counseling group with the spouses of the problem drinker has an effect on his outcome.

A review of the literature showed from 1945 (Baker) to 1977 (Jangen) there have been proponents who advocated the treatment of the wife is often as important as the treatment of the alcoholic. Further, in discussing the alcoholic and his spouse, there seemed to be three distinct categories in which the literature was divided. Support of this contention was drawn from the fact that the major subject reviews (Bailey, 1960;

Janzen, 1977; Steinglass, 1977) divided the field into mental health status of the wife, concurrent group therapy, and conjoint group therapy.

The research reviewed clearly indicated the wives of alcoholics have essentially normal personalities of different types rather than one common style. Additionally, the studies, regardless of whether concurrent or conjoint therapy was employed, offered a fairly persistent theme of the advantage of involving the spouse and family of the alcoholic in treatment. However, it was unclear what form of spouse/family counseling worked best (Steinglass). To help answer this concern, the study was formulated.

The sample population was composed of married clients and their spouses of whom the former were in the Langley Air Force Base Alcohol Rehabilitation Program. The spouses, excluding the controls, and the facilitators were randomly assigned to one of the two treatment groups. The resulting six groups (3 each of husbands and wives) were not significantly different on age, race, education, average number of dependents, or classification of the problem drinker. The only significant difference found was in the length of marriage between the

counseling and the control groups.

Each group was 10 weeks in duration led by an agency certified paraprofessional alcohol counselor. The education group was conducted as a seminar, while the counseling group employed a variety of group exercises. At the completion of the group all participants were asked to fill out a battery of inventories which included the Mooney Problem Check List, the Marital Communication Inventory, the Michigan Alcoholism Screening Test, and the Pittman Scale. The other data analyzed such as biographical information, attendance at therapy, Supervisor's Performance Evaluations, and alcohol-related incidents were routinely collected by the agency.

Seven hypothesis were formulated. The hypothesis, their statistical measure(s), and finding(s) follows:

The first hypothesis was alcoholics whose wives entered treatment showed a greater reduction than the control group in alcohol consumption as measured by the Pittman Drinking Scale. A Chi-Square analysis of a 3 X 6 contingency table of frequencies of responses to the Pittman Scale was run (Table 1). The first hypothesis was rejected.

The second hypothesis was both treatments resulted in the alcoholic having fewer alcoholic-related incidents than the controls. The statistical test was a Chi-Square analysis of a 3 X 4 contingency table of frequencies of alcohol-related incidents (Table 2). The second hypothesis was rejected.

The third hypothesis was both treatments resulted in a more favorable prognosis of family interaction than the controls as measured by fewer number of problems checked on the Mooney Problem Check List and an elevated score on the Marital Communication Inventory. An one-way Analysis of Variance was run on both variables. No differences in the number of problems checked by any of the three groups were found (Table 3). Although there was a significant difference between the education and control groups, as well as between the counseling and control groups, on the MCI scores, it was not in the direction suspected. The means of the two treatment groups were depressed not elevated (Tables 4 - 6). Therefore, the third hypothesis was rejected.

The fourth hypothesis was both treatments resulted in the alcoholics showing a more favorable prognosis than the control group in duty performance as measured by Attendance at Therapy and Supervisor's Performance Evaluations. An one-way

Analysis of Variance was run on both variables. Only the counseling group showed significant differences on the Attendance variable (Tables 7 - 9). Neither treatment was significantly different to the control group on the Supervisor's Evaluations (Table 10). The fourth hypothesis was rejected.

The fifth hypothesis was there is no difference in classification of the problem drinkers and their wives of their ratings of the alcoholic on the Michigan Alcoholism Screening Test. A Chi-Square analysis of a 3 X 2 contingency table of frequencies of alcoholic responses to the MAST was run (Table 11). The fifth hypothesis was rejected.

The sixth hypothesis was there is no significant difference in the treatment outcomes of problem drinkers whose spouse participated in the education group and those whose spouse treatment was the counseling group. The statistical test for the Supervisor's Performance Evaluations (Table 12), Mooney Problem Check List (Table 13) and the Marital Communication Inventory (Table 14) was an one-way Analysis of Variance. The statistical test for the Pittman Scales (Table 15) and the number of Alcohol Related Incidents was a Chi-Square analysis. The sixth hypothesis was rejected.

The seventh hypothesis was there is no significant difference in the treatment outcomes of problem drinkers whose spouse participated in concurrent therapy and those whose spouse treatment was after the problem drinker completed his active program. An one-way Analysis of Variance was run on the dependent variables Supervisor's Performance Evaluations (Table 17), Mooney Problem Check List (Table 18), and the Marital Communication Inventory (Table 19). The statistical test for the Pittman Scales (Table 20) and the number of Alcohol Related Incidents was a Chi-Square analysis. The seventh hypothesis was rejected.

Conclusions

It was assumed in this study that by working with the wives of problem drinkers, it would produce significant changes in the latter's home and work situations. It was also assumed one of the two treatment conditions, although with no bias towards either, would produce better results than the other. A third assumption, again with no bias toward either, was that a significant difference would be found between the groups where the spouse participated concurrently and the one where her

treatment was after her husband had completed his rehabilitation program.

The following conclusions can be drawn from the findings as they relate to the purposes of the study:

There were no significant indications from the results that either the education or the counseling group is more effective than no treatment(control group)at all. The only exception to this statement is that the Attendance at Therapy was better for the counseling group than it was for the control group (probability = .0204 with 1, 18 DF). However, since the rehabilitation program has a very strict attendance requirement, in that all client absences are reported to his supervisor, it may be as much a function of a more conscientious supervisor than a treatment outcome.

On one other variable a significant difference was found. For the Marital Communication Inventory, it was hypothesized that marital communications would increase. However, the treatment means as compared to the control means was depressed not elevated. The possible reason for this finding is commented on in the next section.

When the education, the counseling, and the control groups were compared, no significant differences were found. Likewise, when the concurrent therapy group was compared to the spouse group,

who participated after the husband completed his rehabilitation program, no significant difference on any of the variables was found.

The above conclusions, even though limited in scope, must be interpreted cautiously. The sample size, itself, was a limiting factor - to wit - the warning received on all Chi-Square analyses that the results may not be valid because of sample size.

Nonetheless, the study did have two noteworthy eventualities. Contrary to the usual findings of the research such as Gliedman et al. (1956), Pattison, et al. (1965), and Smith (1969), both the initial participation rate of 29 of 39 (74%) as well as the group attendance of 56% for the education group and 63% for the counseling group was well above that previously reported as norm.

Implications

The conclusions of this chapter have direct implications to the related research reviewed in Chapter 2. Eight of the nine studies employing concurrent group therapy and all 10 of the conjoint therapy studies were enthusiastic in support of the contention that aid to the wife brought therapeutic benefit to the alcoholic. This study does not statistically support such a contention.

If this author took only the subjective reports of the group facilitators and/or the group critique sheets the results would have been much different, for the facilitators and participants were quite ebullient about the proceedings. But their ardor and the data did not go hand-in-hand.

To try to explain why these results are so inconsistent with the literature findings, the primary factors of the study were scrutinized. The comparison of sample sizes generally favored this study, as most of the samples in the literature were smaller. A possible reason for the differences found was that this study did not use a randomized control group. But 13 of the 19 studies reviewed did not even have a control group. Thus, true non-bias research is suspect in both cases. Another possible interpretation is that this study was the only one to use a military population. However, the most likely explanation is that the sample size used, although larger than the average study, was still too small to give consistent valid data.

There are two other findings that warrant further elucidation. Hypothesis 3 assumed that as a result of either treatment the mean of the Marital Communication Inventory would rise, indicating an increase in communications. However, the

opposite happened; the means were deflated. It is the opinion of this author that the means of the treatment groups were closer to reflecting the actual marital communication modes. It appears the means of the control group were inflated due to the natural propensity to fake good. The treatment groups would not have had this need, since the facilitator probably had established a rapport where such a response would not have been appropriate.

The other eventuality was the high acceptance rate and attendance figures. First, any remarks on this subject must be prefaced by Ewing's et, al (1961) sage advice that the wife's cooperation cannot be taken for granted. This is most likely due to her understandable doubt that after her other efforts to cure her husband had failed, why should this group work. Still, this study did have a noticeably high (74%) participation rate. It is probably a function of the closed and sometimes regimented military society. The high attendance percentage would also be partially explained by this. Another possible explanation of the attendance could be the client's rapport with the facilitator and her group. And one must not

overlook the entirely possible sincere effort of the spouse to help herself and her husband.

Recommendations

The following recommendations are made for further study when testing the effects of spouse counseling on the treatment outcomes of the alcoholic:

1. The study should be replicated utilizing a larger number of cases.

2. The study should be repeated with subjects randomly assigned to the control group.

3. The study should be replicated utilizing subject and spouse groups composed of both males and females.

4. The study should be replicated using a civilian population as subjects.

5. Further study regarding the length of treatment for the spouse should be undertaken.

6. Further study regarding the effects of treatment on the spouses should be performed.

7. Further study should be conducted to determine if having the spouse enter treatment as soon as the husband is identified is more effective than the present method.

8. The study should be replicated using more sensitive measuring devices, especially alcohol consumption scales.

9. The study should be repeated comparing the treatments of an education group, a counseling group, and a combined education/counseling group to a control group.

APPENDIX A

Education Group

	Problem Drinker	Spouse
1. Sample Size	12	12
2. Average Age	32.6 years	31.2 years
Range	19 - 44 years	19 - 43 years

3. Grade:

Airman Basic - Senior Airman	3
Sergeant - Chief Master Sergeant	8
Officer	1

Present Occupation

Housewife	7
Non-professional	4
Professional	1

4. Race:

White	10	10
Black	2	2

5. Education:

Incomplete High School	-	1
High School Graduate	8	8
College Incomplete	2	1
College Graduate	1	2
Graduate Degree(s)	1	-

6. Average Length of Present Marriage: 8.8 years
Range Less than 6 weeks - 23 years

7. Average Number of Dependents: 2
Range 0 - 7

8. Method of Referral

Self	2	Not applicable
Commander or Supervisor	3	
Traffic Accident or Court	3	
Spouse	1	
Incident (excluding traffic)	-	
Medical	3	

9. Classification (accomplished by a Medical Doctor)

Alcoholic	9	Not applicable
Problem Drinker	2	
Not Available	1	

Counseling Group

	Problem Drinker	Spouse
1. Sample Size	11*	11*

(All other statistics are based on 9 subjects as 2 spouses failed to participate)

2. Average Age	33	32.9
Range	21 - 57	18 - 55

3. Grade:

Airman-Senior Airman	2
Sergeant - Chief Master Sergeant	7
Officer	0

Present Occupation:

Housewife	6
Non-Professional	3
Professional	0

4. Race:

White	6	6
Black	3	3

5. Education:

Incomplete High School	1	3
High School Graduate	7	3
College Incomplete	-	3
College Graduate	1	-
Graduate Degree(s)	-	-

6. Average Length of Present Marriage: 12.1 years
Range 2 months - 33 years

7. Average Number of Dependents: 2
Range 0 - 3

8. Method of Referral:

	Problem Drinker	Spouse
Self	1	Not applicable
Commander or Supervisor	2	
Traffic Accident or Court	3	
Spouse	1	
Incident (excluding traffic)	1	
Medical	1	

9. Classification (Accomplished by a Medical Doctor)

Alcoholic	7	Not applicable
Problem Drinker	2	
Not Available	-	

Control Group

	Problem Drinker	Spouse
1. Sample Size	10	10
	(all other statistics are based on 7 subjects as 3 spouses failed to participate)	
2. Average Age	29.7 years	29.4 years
Range	22 - 44 years	20 - 46 years

3. Grade		Present Occupation	
Airman - Senior Airman	3	Housewife	3
Sergeant - Chief Master-Sergeant	2	Non-Professional	4
GS9 (civilian)	1	Professional	-
Officer	1		

4. Race		
White	6	6
Black	1	1

5. Education		
Incomplete High School	-	1
High School Graduate	5	2
College Incomplete	-	3
College Graduate	2	1
Graduate Degree(s)	-	-

6. Average Length of Present Marriage: 4.9
Range 5 months - 13 years

7. Average Number of Dependents:	1, 2
Range	0 - 2

8. Method of Referral	Problem Drinker	Spouse
Self	-	Not
Commander or Supervisor	2	Applicable
Traffic Accident or Court	2	
Spouse	-	
Incident (excluding traffic)	1	
Medical	2	

9. Classification (Accomplished by a Medical Doctor)		Not
Alcoholic	5	Applicable
Problem Drinker	2	
Not Available	-	

Refused Participation

	Problem Drinker
1. Sample Size	7
2. Average Age	31.6
Range	22 - 39
3. Grade:	
Airman - Senior Airman	1
Sergeant - Chief Master Sergeant	6
4. Race	
White	4
Black	3
5. Education:	
Incomplete High School	-
High School Graduate	4
College Incomplete	3
College Degree	-
Graduate Degree(s)	-
6. Average Length of Present Marriage	4.8 years (1 widower)
Range	6 months - 9 years
7. Average Number of Dependents	2
Range	1 - 3

	Problem Drinker
8. Method of Referral	
Self	-
Commander or Supervisor	1
Traffic Accident or Court	4
Spouse	-
Incident (excluding traffic)	1
Medical	1
9. Classification (Accomplished by a Medical Doctor)	
Alcoholic	6
Problem Drinker	1
Not Available	-

APPENDIX B

Marital Communication Inventory
MCI

A. General Information

a. Author - Millard J. Bienvenu, Sr.

b. 1969/Forms Male and Female

c. Publishers - Family Life Publications, Inc. (P.O. Box 427, Saluda, N.C. 28773)

d. Time Required to Administer - 20 minutes

e. Level of Test - B

f. Cost - $1.00 specimen set; $4.50 per 25 answer sheets; $1 per manual.

B. Purpose and Nature

a. General - Designed to help counselors assess the marital relationship for purposes of individual counseling. It is also a teaching and research tool in the area of marriage and family life education.

b. Population for which Designed - Suitable for couples of any age living together.

c. Nature of Content - Paper and Pencil.

d. Scoring System - The four responses to each question are Usually, Sometimes, Seldom, and Never and are scored from 0 - 3. The possible range of total scores is from 0 - 144. Bienvenu (1978) states: The higher the total score, the higher the level of and the more successful the individual is in marital communication (p. 4).

e. Type of Items - The 48 items were formulated from a review of the literature and from the author's experience. Concepts and ideas were also from colleagues and from an examination of existing instruments dealing with marital interaction.

C. Practical Evaluation

a. Qualitative Features - Bienvenu reports the inventory requires only a 7th grade reading level.

b. Ease of Administering and Scoring - Simple; It is a self-administered form that can be given either individually or in groups; can be scored in minutes.

D. Technical Evaluations

a. Norms - The author provides a table that gives the mean and standard deviation scores of a sample of 210 couples that was completed in 1973 on a population on North and Central Louisiana couples. He also cites the mean scores of a more recent study but fails to give any other information on the latter research.

b. Reliability - One reliability study has been completed thus far by the author. Using the Spearman-Brown formula and a split-half technique, computed on scores of 60 respondents a coefficient of .93 was found after correction (Bienvenu, 1978, p. 6).

c. Validity - In a quartile comparison forty of the items were found to significantly discriminate between the upper and lower quartiles. Comparisons were also made between a group of couples in marriage counseling and a matched group not known to be having marital difficulties. Use of the Mann-Whitney U test resulted in a significant difference U-117, $p = .01$ between the groups' scores (Murphy and Mendelson, 1973, p. 319).

E. User Evaluation - Murphy and Mendelson studied the relationship between marital communication and adjustment using the MCI and the Locke Marital Adjustment Scale. Their research of 30 young married students in their early twenties found a correlation of .846 between the two tests. The authors concluded: 1) The results offer support to the growing body of information suggesting that adjustment and communication in marriage are highly interrelated; 2) It also offers further validity to the MCI as a helpful measure of marital communication.

F. Summary Evaluation - The MCI is a relatively new scale with a favorable but limited technical research data base.

Michigan Alcoholism Screening Test
MAST

A. General Information

a. Author - Melvin Selzer

b. Developed in 1968, minor revision in 1975.

c. Publishers - Not applicable; the MAST can be found in the Journal of Alcohol Studies (36 (1): 117 - 126, 1975)).

d. Time required to Administer - An oral administration takes 15 - 60 minutes; a self-administration takes approximately 10 minutes.

e. Level of Test - B.

f. Cost - Not applicable; the MAST must be copied from the literature. Its cost would be minimal and would be that associated with local reproduction.

B. Purpose and Nature

a. General - Devised to provide a consistent, quantifiable, structured interview instrument to detect alcoholism, that can be rapidly administered.

b. Population for which Designed - Detection of the problem drinker in an otherwise normal population.

c. Nature of Content - Either conducted as a structured interview or as a pencil and paper schedule with verbal follow-up.

d. Scoring System - Item scores on the MAST are summed to yield a single over-all score that reflects the severity of alcohol involvement. Scores of 0 - 3 are considered to be normal. A score of 4 suggests the client may have a

problem with alcohol. A score of 5 or more indicates the client is alcoholic in his/her drinking pattern. A predetermined score of 0, 1, 2, or 5 (three questions) is given to each response.

e. Type of Item - Short statements that have content validity.

C. Practical Evaluations

a. Qualitative Features - Although content is straightforward and obvious in its intentions, the client generally answers truthfully in over 80% of observed cases (Kaplan, Kanas, & Lively, 1974; Morse & Swenson, 1975). Correlating with attending medical opinions is high, in one study it was 78% (Moore, 1972) and 75% in another (Siassi & Alston, 1976).

b. Ease of Administering and Scoring - Simple; May be administered either orally or by oneself; The scoring key is easy to use and takes less than a minute to obtain a score.

D. Technical Evaluation

a. Norms - There are no norms for the MAST. However, in studies where the MAST is used to screen for alcoholism and this result is compared to an established norm the results are favorable (Favazya & Pires, 1974; Morse & Swenson, 1975).

b. Reliability - Selzer, Vinoken, and Rooyen (1975) obtained a reliability coefficient of .95 based on results from 501 male drivers and 228 alcoholic outpatients. The reliability of the MAST in terms of the internal consistency was determined by coefficient alpha, which provides an upper estimate of the stability of the test score with repeated administrations.

c. Validity - Selzer, et al. in the same study cited above computed a validity coefficient of .79. They also checked the validity when controlling for age (.72) and when checked with the tendency to Deny-Bad controlled the validity coefficients remained exactly the same (p. 21).

E. Users' Evaluation - Kaplan, Kanas, and Lively (1974) considered the questions of whether or not the MAST functioned to define instances of self-identified alcoholism as opposed to, or as well as, instances of the alcoholic condition in general. The authors research supported their hypotheses that (1) the self-identified alcoholic patient does score significantly higher than other alcohol patients; and (2) the self-identified alcoholic responds positively with a significantly greater frequency to the specific MAST items that were independently judged to reflect alcoholic self-identification (p. 51).

Favayza and Pires (1974) in their study concluded the MAST is a valid screening device for alcoholism in a military population.

Morse and Swenson (1975) gave an expanded version of the MAST to a group of hospitalized alcoholics. Their spouses and counselors also completed the MAST, describing the patients. Based on results from 50 patients, it was found that the diagnosis of alcoholism could be made from patient's information alone in 84% of the cases and from spouse information alone in 90%.

Zung and Charalampous (1975) conducted an item analysis of the MAST. They concluded the internal validity of the test was supported by the finding that few items failed to correlate significantly with the total score and that few (4) failed to discriminate between problem and nonproblem drinkers.

F. Summary Evaluation - The MAST is a quick and reliable screening device. An extended bibliography on the MAST and its uses may be obtained from the National Institute of Alcohol & Alcohol Abuse (NIAAA).

MICHIGAN ALCOHOLISM SCREENING TEST

		Yes	No
0.	Do you enjoy a drink now and then?	___	___
1.	Do you feel you are a normal drinker? (By normal we mean do you drink as much or less than most other people.)	___	___
2.	Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening?	___	___
3.	Does your wife, husband, a parent, or other near relative ever worry or complain about your drinking?	___	___
4.	Can you stop drinking without a struggle after one or two drinks?	___	___
5.	Do you ever feel guilty about your drinking?	___	___
6.	Do friends or relatives think you are a normal drinker?	___	___
7.	Are you able to stop drinking when you want to?	___	___
8.	Have you ever attended a meeting of Alcoholics Anonymous (A.A.)?	___	___
9.	Have you gotten into physical fights when drinking?	___	___
10.	Has drinking ever created problems between you and your wife, husband, a parent, or other near relative?	___	___

	Yes	No
11. Has your wife, husband (or other family members) ever gone to anyone for help about your drinking?	____	____
12. Have you ever lost friends or girlfriends because of drinking?	____	____
13. Have you ever gotten into trouble at work because of drinking?	____	____
14. Have you ever lost a job because of drinking?	____	____
15. Have you ever neglected your obligations, your family, or your work for two or more days in a row because you were drinking?	____	____
16. Do you drink before noon fairly often?	____	____
17. Have you ever been told you have liver trouble? Cirrhosis?	____ ____	____ ____
18. After heavy drinking have you ever had Delirium Tremens (D. T.'s) or severe shaking, or heard voices or seen things that weren't really there?	____	____
19. Have you ever gone to anyone for help about your drinking?	____	____
20. Have you ever been in a hospital because of drinking?	____	____
21. Have you ever been a patient in a psychiatric or mental hospital or on a psychiatric ward of a general hospital where drinking was part of the problem that resulted in hospitalization?	____	____

	Yes	No
22. Have you ever been to a psychiatric or mental health clinic or gone to any doctor, social workers, or clergyman for help with any emotional problem, where drinking was part of the problem?	____	____
23. Have you ever been arrested for drunk driving, driving while intoxicated, or driving under the influence of alcoholic beverages? (If Yes, how many times? ___)	____	____
24. Have you ever been arrested, even for a few hours, because of other drunk behavior? (If Yes, how many times? ___)	____	____

Name:_____

Date Administered:_____

Alcohol Counselor: _____

Mooney Problem Check List

A. General Information

a. Authors - Ross L. Mooney and Leonard V. Gordon.

b. 1950 Revision/Forms - (1) Adult, (2) College, (3) H.S., (4) Jr. HI.

c. Publishers - The Psychological Corporation (304 E. 45 St., NY, NY 10017) 1950.

d. Time Required to Administer - 20-50 minutes.

e. Level of Test - B.

f. Cost - $1.25 specimen set, $2.80 per 50 IBM score sheets, $9.90 per 100 hand sheets.

B. Purpose and Nature

a. General - To help people express their personal problems.

b. Population for which Designed - Form each for adult, college, H.S., and Jr. HI.

c. Nature of Content - Pencil and paper - follow-up verbal.

d. Separate Scores - Areas covered vary with age level but usually cover finances, living conditions, employment, personal-psychological, recreational, courtship, sex, marriage, the future, etc.

e. Type of Items - Short statements grouped in sets of 5 questions, each separate problem area contains 30 questions.

C. Practical Evaluations

a. Qualitative Features - Fair to good presentation of short statements. Since 1950 was the last revision there is suspect wording of a few and major areas not covered (i.e. Race and Drug Abuse).

b. Ease of Administering and Scoring - Simple; can be machine or hand scored/administered in individual or group settings.

D. Technical Evaluation

a. Norms - No table of norms/authors suggest local developing/items originally culled from an impressive array of sources/wide usage suggest wide applicability.

b. Reliability - Indiv. - The checklist is designed to reflect the problems which a student senses and is willing to express at a given time. Therefore R is not important since it is internalized. Survey - unpublished studies reflect a test-retest R of .90+.

c. Validity - Manual states that an over-all index of validity of the checklists would be quite meaningless. Further gives circumstantial evidence of validity through studies published in the following areas: (1) Responsiveness - varies according to community - 23 - 25 is average (2) Constructive attitude - 70 - 85% report they enjoyed filling out the list - Caution - mere use of the lists are not enough - both intention and ability of the school staff to follow through are essential. (3) Coverage of problems - adequate to excellent (4) Acceptance by educators and counselors - pre 1950 forms over a half-million used.

E. Reviewer's Evaluation (6th Mental Measurements Yearbook/146). In summary, the information available from all sources suggests that the popularity of the MPCL is well deserved, and that it may be used appropriately in the ways suggested by the authors. The authors should be commended for their professionally responsible presentation in the manual, and especially for their repeated warnings about the various ways in which the information from the

checklist could be misinterpreted. The user should observe these cautions carefully.

F. Summary Evaluation - Some statements are out of date and other major problem areas ignored. However, in a busy counseling center or for a confused client its usage may well speed the counseling process. Helps to point out to a client that by seeing his problem he may realize his problem isn't unique. List of references is provided.

Pittman Drinking Scale

A. General Information

a. Author - David J. Pittman

b. Developed in 1962.

c. Publishers - Harper & Row (Alcoholism, ed. D. J. Pittman, 1967).

d. Time Required to be Administered - Less than 5 minutes.

e. Level of Test - B.

f. Cost - Not applicable; The scale must be copied from the literature. Its cost would be minimal and would be that associated with local reproduction.

B. Purpose and Nature

a. General - Questions are designed to evaluate a change in a person's drinking pattern.

b. Population for which Designed - The scale is to be used with problem drinkers who have no other known psychiatric abnormality.

c. Nature of Content - Paper and pencil. Follow-up using objective data references may be accomplished.

d. Scoring System - Although detailed answers are given to each question, for scaling purposes, the answer categories are dichotomized so that in each case is given a score of "0" of "1" with the higher score indicating a greater amount of drinking.

e. Type of Item - The questions measure the frequency with which a person drank; the amount of drinking, that is,

whether he usually drank to intoxication; work or job loss from drinking; whether treatment was required for one's drinking; and whether there had been periods during which the person had not drunk, and if so, how long these periods lasted.

C. Practical Evaluation - The scale is extremely easy to administer and score. In addition, the response to the questions usually provide fertile material for future counseling sessions.

D. Technical Evaluation

a. Norms - None provided (It is not usual for a follow-up survey to have norms. At best one may be able to compare their findings with a previous research effort. Although this is possible in this instance, it is not advised since the original research is over 15 years old and conducted on an in-patient population.)

b. Reliability - 100 cases were used for pilot test. These yielded a coefficient of reproducibility of .90.

c. Validity - Pittman found the validity of the follow-up scale containing both study and control cases to be .90. For study cases only, the coefficient increased to .91, and for the controls, .94.

E. Summary - The Pittman scales are one of the very few of its kind to be found in the literature. Although the literature refers to measures of this kind, no examples and no studies on the scales themselves are readily available.

Pittman Drinking Scale

Scale Items	Score 0	Score 1
1. Have you been drinking since starting this program, and if so how often?	No drinking	Any drinking
2. How long has your longest dry period been since starting this program?	10 weeks or more	Less than 10 weeks
3. Have you had any treatment for drinking, other than the Social Actions program since starting here on base?	No other treatment	Any other treatment (Except AA)
4. Have you been intoxicated since you began the program, and if so, how often?	Never intoxicated	Any intoxication
5. How many days did you lose from work (or used leave) because of drinking, since you began the program? Did you lose any jobs due to drinking?	No days or jobs lost	Any lost days or jobs

Pittman Drinking Scale

Scale Items	Score 0	Score 1
1. Have you been drinking since completion of the active involvement with the Social Actions office?	No drinking	Any drinking
2. How long has your longest dry period been since completing your active involvement with Social Actions?	10 weeks or more	Less than 10 weeks
3. Have you had any treatment for drinking since completing your active involvement with Social Actions?	No other treatment	Any other treatment (Except AA)
4. Have you been intoxicated since you completed your active involvement with Social Actions?	Never intoxicated	Any intoxication
5. How many days did you lose from work (or used leave) because of drinking since you completed your active involvement with Social Actions? Did you lose any jobs?	No days or jobs lost	Any days or jobs lost

APPENDIX C

Group Leader Qualifications

Thomas Ray
Civilian, USAF
Langley Air Force Base, Va.

Education Background

High School Graduation, 1951, Sophia, West Virginia
65 semester hours of college work to date.

Relevant Technical Education

110 week - Alcohol Counselor Workshop, Johns Hopkins University, October 1974.
9 week - USAF Drug/Alcohol School, Lackland AFB, Texas, May 1977.
3 week - Rutgers University School of Alcoholism, July, 1978.

Short Courses

Overview of Alcoholism (1 week) Virginia Commonwealth University, October 1975.
Alcoholism and Significant Other (4 days) - Virginia Commonwealth University, June 1976.
The Supervisor and Alcoholism (4 days) - Virginia Commonwealth University, October 1976.
8 other short workings related to counseling and/or alcoholism.

Experience

33 months, USAF Drug/Alcohol Abuse Control Specialist (October 1975 - June 1978).
3 years Part-time - Virginia ASAP Instructor and Counselor
9 months - Alcoholism Counselor, State of Virginia - Peninsula Health Center

Counselor's Theoretical Orientation (Self-Professed)

12 Step Program - AA.

Group Leader Qualifications

Tony Colon-Velez
Staff Sergeant, USAF
Langley AFB, Va.

Education Background

High School Graduation 1961, New York, N.Y.
B.S. Philosophy - Christopher Newport College, 1976, Newport News, Va.
M.S., Counseling Psychology - Pepperdine University, 1978, Off-Campus Study.

Relevant Technical Education

9 week - USAF Drug/Alcohol School, Lackland AFB, Texas, August, 1976
6 week - Alcohol Counselor Workshop, Johns Hopkins University, August 1977.

Experience

21 months, USAF Drug/Alcohol Abuse Control Non-Commissioned Officer (October 1976 - June 1978)

Counselor's Theoretical Orientation (Self-Professed)

Reality Therapy

APPENDIX D

Education Group

The main focus of each weekly session was:

Session 1.	Introduction; Proposed group schedule presented; lecture on the different types of alcoholics.
Session 2.	Discussion and presentation of the film, "I'll Quit Tomorrow."
Session 3.	Jellinek chart and Johnson Mood Swing presented.
Session 4.	Guest speaker from Al-Anon.
Session 5.	Group discussion on Controlled Drinking, Manipulation, and Enabling Roles.
Session 6.	Presentation of film "Chalk Talk" and lecture on medical aspects.
Session 7.	The film "Meaningful Intervention" and a lecture on anger was given.
Session 8.	Guest lecture on "The Whole Person Concept" (Family Aspects) and a discussion of the USAF rehabilitation committee meetings.
Session 9.	AA speaker and discussion.
Session 10.	The films "The Summer We Moved To Elm Street" (Family Aspects) and "You Pack Your Own Chute" (Self-Motivation).

Counseling Group

The main focus of each weekly session was:

Session 1.	Introduction; Proposed group schedule presented; Ice-breaker exercises.
Session 2.	Discussion of family life style.
Session 3.	Exercise ("Feeling About Myself") and discussion on feelings.
Session 4.	Film "Pack Your Own Chute" (Self-Motivation) and concentration on how to make decisions.
Session 5.	Further discussion on the need to make responsible decisions.
Session 6.	How life in an "alcoholic" home affects personal growth.
Session 7.	Understanding the alcoholic
Session 8.	Discussion and presentation of the film "I'll Quit Tomorrow."
Session 9.	Effect of alcohol within the family circle.
Session 10.	Exercise: The Other You: Awareness Expansion.

REFERENCES

Al-Anon Family Group Headquarters, Inc. Alcoholism, the family disease. New York: Author, 1972.

Alcohol: A family affair. (DHEW Publication No. (ADM) 75-163). Washington, D.C.: U.S. Government Printing Office, 1974.

Alcoholics Anonymous World Services, Inc. Alcoholics anonymous. New York: Author, 1955.

Bailey, M. B. Alcoholism and marriage. A review of research and professional literature. Quarterly Journal of Studies on Alcohol, 1961, 22, 81 - 97.

Bailey, M. B., Haberman, P., Alksne, H. Outcomes of alcoholic marriages: Endurance, tremination or recovery. Quarterly Journal of Studies on Alcohol, 1962, 23, 610 - 623.

Baker, S. D. Excessive drinking and the institution of the family. In Alcohol, Science, and Society, New Haven, Conn.: Yale University, 1945.

Berman, K. K. Multiple conjoint family groups in the treatment of alcoholism. Journal Medical Society of New Jersey, 1968, 65, 6 - 8.

Bienvenu, M. J. Sr. A marital communication inventory: Manual. Saluda, N.C.: Family Life Publications, 1969.

Bienvenu, M. J. Sr. Measurement of marital communication. The Family Coordinator, 1970, 19, 26 - 31.

Boggs, M. H. The role of social work in the treatment of inebriates. Quarterly Journal of Studies on Alcohol, 1944, 4, 557 - 567.

Boggs, S. L. Meaaure of treatment outcome for alcoholics: A model of analysis. In D. J. Pittman (Ed.), Alcoholism. New York: Harper and Row, 1967.

Burton, G. Group counseling with alcoholic husbands and their non-alcoholic wives. Marriage and Family Living, 1962, 24, 56 - 61.

Burton, G., and Kaplan, H. Group counseling in conflicted marriages where alcoholism is present: Client's evaluation of effectiveness. Journal of Marriage and the Family, 1968, 30, 74 - 79. (a).

Burton, G., Kaplan, H. M. Marriage counseling with alcoholics and their spouses. II. The correlation of excessive drinking behavior with family pathology and social deterioation. British Journal of Addiction, 1968, 63, 161 - 170 (b).

Cadogan, D. A. Marital group therapy in the treatment of alcoholics. Quarterly Journal of Studies on Alcoholism, 1973, 34 (4), 1187 - 1194.

Cheek, F. E., Franks, C. M., Laucius, J., and Burtle, V. Behavior-modification training for wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1971, 32, 456 - 461.

Christopher, D. Smithers Foundation. Understanding Alcoholism. New York: Charles Scribner's Sons, 1968.

Clifford, B. J. A study of the wives of rehabilitated and unrehabilitated alcoholics. Social Casework, 1960, 41, 457 - 460.

Clancy, J., Vornbrock, R., and Vanderhoof, E. Treatment of alcoholics: A follow-up study. Diseases of the Nervous System, 1965, 26, 551 -561.

Corder, B. G., Corder, R. G., and Laidlaw, N. D. An intensive treatment program for alcoholics and their wives. Quarterly Journal of Studies on Alcohol, 1972, 33, 1144 - 1146.

Crawford, J. J., and Chalupsky, A. B. The reported evaluation of alcoholism treatments, 1968 - 1971: A methodological review. Addictive Behaviors, 1972, 2, 63 - 74.

Do's and Dont's: For the wives of alcoholics. Center City, Mn.: Hazelden Foundation.

Edwards, P., Harvey, C., and Whitehead, P.C. Wives of alcoholics: A critical review and analysis. Quarterly Journal of Studies on Alcohol, 1973, 34, 112 - 131.

El-Guebaly, N., and Offord, D.R. The offspring of alcoholics: A critical review. American Journal of Psychiatry, 1977, 134(4), 357 - 364.

Elliott, M.E. A study of communication and empathy in marital adjustment (Doctoral Dissertation, The Texas Woman's University, 1974). Dissertation Abstracts International, 1975. (University Microfilms, No. 75-09069).

Emrick, C. D. A review of psychologically-oriented treatment of alcoholism. I. The use and interrelationships of outcome criteria and drinking behavior following treatment. Quarterly Journal of Studies on Alcohol, 1974, 35, 523 - 549.

Esser, P. H. Conjoint family therapy with alcoholics - A new approach. British Journal of Addiction, 1970, 64, 275 - 286.

Estes, N. J., and K. J. Hanson. Sobriety: Problems, challenges, and solutions. American Journal of Psychotherapy, 1976, 30, 256 - 266.

Ewing, J. A., Long, V., and Wengell, G.G. Concurrent group psychotherapy of alcoholic patients and their wives. International Journal of Group Psychotherapy, 1961, 11, 329 - 338.

Favazza, A., and Pires, J. The Michigan alcoholism screening test: An application in a general military hospital. Quarterly Journal of Studies on Alcohol, 1974, 35 (3), 925 - 939.

Finlay, D. G. Alcoholism: Illness or problem in interaction. Social Work, 1974, 19 (4), 398 - 405.

Futterman, S. Personality trends in wives of alcoholics. Journal of Psychiatric Social Work, 1953, 23 (37), 37 - 41.

Gliedman, L. H., Rosenthal, D., Frank, J. D., and Nash, N. T. Group therapy of alcoholics with concurrent group meetings of their wives. Quarterly Journal of Studies on Alcohol, 1956, 17, 655 - 670.

Goldfried, M. R. Prediction of improvement in an alcoholism outpatient clinic. Quarterly Journal of Studies on Alcohol, 1969, 30, 129 - 139.

Haberman, P. W. Psychological test score changes for wives of alcoholics during periods of drinking and sobriety. Journal of Clinical Psychology, 1964, 20, 230 - 232.

Hedberg, A. G., and Campbell, L. A comparison of four behavioral treatments of alcoholism. Journal of Behavior Therapy, 1974, 5, 251 - 256.

Ingersheimer, W. W. Group psychotherapy for nonalcoholic wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1959, 20, 77 - 85.

Jackson, J. K. The adjustment of the family to the crisis of alcoholism. Quarterly Journal of Studies on Alcohol, 1954, 15, 562 - 586.

Jackson, J. K. Alcoholism and the family. In D. J. Pittman and C. R. Snyder (Eds.). Society, Culture, and Drinking. New York: Wiley, 1962.

James, J. E., and Goldman, M. Behavior trends of wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1971, 32, 373 - 381.

Janzen, C. Families in the treatment of alcoholism. Journal of Studies on Alcohol, 1977, 38 (1), 114 - 130.

Johnson, V. E. I'll quit tomorrow. New York: Harper & Row, 1973.

Keller, M. (Ed.). Trends in treatment of alcoholism. In Second Special Report to the U.S. Congress on Alcohol and Health. Department of Health, Education, and Welfare, Washington, D.C., 1974.

Kaplan, H., Kanas, T., and Lively, G. Screening tests and self-identification in the detection of alcoholism. Journal of Health and Social Behavior, 1974, 15 (1), 51 - 56.

Lemert, E. M. The occurrence and sequence of events in the adjustment of families to alcoholism. Quarterly Journal of Studies on Alcohol, 1960, 21, 679 - 697.

Macdonald, D. E. Mental disorders in wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1956, 17, 282 - 287.

Macdonald, D. E. Group psychotherapy with wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1958, 19, 125 - 132.

Meeks, D. E., and Kelly, C. Family therapy with the families of recovering alcoholics. Quarterly Journal of Studies on Alcohol, 1970, 31 (2), 399 - 413.

Moore, R. A. The diagnosis of alcoholism in a psychiatric hospital: A trial of the Michigan alcoholism screening test. American Journal of Psychiatry, 1972, 128 (12), 115 - 119.

Morse, R. M., and Swenson, W. M. Spouse response to a self-administered alcoholism screening test. Journal of Studies on Alcohol, 1975, 36 (3), 400 - 405.

Murphy, D. C., and Mendelson, L.A. Communication and adjustment in marriage: Investigating the relationship. Family Process, 1973, 317 - 326.

Olsen, D. H. Marital and family therapy; Intergrative review and critique. Journal of Marriage and Family, 1970, 32, 501 - 538.

Oxford, S., and Guthrie, S. Coping behavior used by wives of alcoholics: A preliminary investigation. Abstract from the International Congress on Alcoholisms, 1968, 97.

Paolina, R. J., McCrady, B., Dramond, S., and Longabaugh, R. Psychological disturbances in spouses of alcoholics. Journal of Studies on Alcohol, 1976, 37 (11), 1600 - 1608.

Pattison, E. M., Courlas, P. G., Patti, R., Mann, B., and Mullen, D. Diagnostic-therapeutic intake groups for wives of alcoholics. Quarterly Journal of Studies on Alcohol, 1965, 26, 605 - 616.

Pfeiffer, J. W., and Jones, J. E. A handbook of structured experiences for human relations training (Vols. I - VI), 1969 - 1977.

Pittman, D. F. Alcoholism. New York: Harper & Rowe, 1967.

Pixley, J. M., and Stiefel, J. R. Group therapy designed to meet the needs of the alcoholic's wife. Quarterly Journal of Studies on Alcohol, 1963, 24, 304 - 314.

Pokorny, A. D., Miller, B. A., and Cleveland, S. E. Response to the treatment of alcoholism: A follow-up study. Quarterly Journal of Studies on Alcohol, 1968, 29, 364 - 381.

Price, G. M. A study of the wives of twenty alcoholics. Quarterly Journal of Studies on Alcohol, 1945, 5, 620 - 627.

Schneidmuhl, A. M., Augustus, G. L., and Sehall, R. B. Handbook for the alcoholism counselor (2nd Ed.) (National Institute on Alcohol Abuse and Alcoholism), Washington, D. C.: U.S. Department of Health, Education and Welfare, 1972.

Selzer, M. D. The Michigan alcoholism screening test: The quest for a new diagnostic instrument. American Journal of Psychiatry, 1971, 127 (12), 89 - 94.

Selzer, M. L., Vinokur, A., and Rooijen, L. A self-administered short Michigan alcoholism screening test (SMAST). Journal of Studies on Alcohol, 1975, 36 (1), 117-126.

Siassi, I., and Alston, D. Methadone maintenance and the problem with alcohol. American Journal of Drug and Alcohol Abuse, 1976, 3 (2), 267 - 277.

Smith, C. G. Alcoholics: Their treatment and their wives. British Journal of Psychiatry, 1969, 115, 1039 - 1042.

Srole, L., Lannger, T. S., Michael, S. T., Opler, M. K., and Rennie, T. A. Mental health in the metropolis. The midtown Manhattan study, Volume I. New York: McGraw-Hill, 1962.

Steinglass, P. Family therapy in alcoholism. In B. Kissin and H. Begleiter (Eds.), The biology of alcoholism (Vol. 5). New York: Plenum Publishing Co., 1977.

Steinglass, P., Davis, D. R., and Berenson, D. Observations of conjointly hospitalized alcoholic couples during sobriety and intoxicated implications for theory and therapy. Family Process, 1977, 16, 1 - 16.

Tarter, Ralph E. Personality of wives of alcoholics. Journal of Clinical Psychology, 1976, 32 (3), 741 - 743.

Whalen, T. Wives of alcoholics: Four types observed in a family service agency. Quarterly Journal of Studies on Alcohol, 1953, 14, 632 - 642.

Wright, K. D. Current drinking status of alcoholic men and the treatment received by their non-alcoholic wives (Doctoral dissertation, University of North Dakota, 1975). Dissertation Abstracts International, 1975. (University Microfilms No. 76-18156).

Zung, B., and Charalampous, K. D. Item analysis of the Michigan alcoholism screening test. Journal of Studies on Alcohol, 1975 , 36 (1), 127 - 132.

PAUL J. JOHNSTON
Assistant Professor of Aerospace Studies
Rutgers - The State University of New Jersey

EDUCATION

Auburn University (Alabama)	Accounting	B.S.	1971
Auburn University	Counseling Education	MEd	1972
William & Mary (Virginia)	Counseling	EdS	1976

Drug & Alcohol course - USAF - 4 weeks 1973
Equal Opportunity Course - USAF - 9 weeks 1974
Academic Instructor School - USAF - 6 weeks 1978
Numerous workshops in counseling, drug/alcohol and equal opportunity

HONORS

Outstanding Teacher (1978/79) Rutgers College Parents Assoc.
AF Commendation Medal (2)
Phi Kappa Phi

WORK EXPERIENCE

7/78 - present: Assistant Professor of Aerospace Studies. Teach: 1) The Professional Officer, 2) Leadership & Management; and 3) Leadership Laboratory: Educational Advisor to 45 students (Freshman - Senior)

8/77 - 6/78: Wing Drug/Alcohol Abuse Control Officer. Program manager and chief drug/alcohol counselor for base of 10,000.

6/74 - 7/77: Wing Equal Opportunity Officer. Affirmative Action/EOT program manager and chief counselor for base of 10,000.

3/73 - 6/74: Social Actions Officer. Program manager for all social actions concerns for an Air Force station of 1,000.

9/72 - 3/73: Education Officer. Program manager for the technical training courses for an Air Force station of 1,000.

EFFECTS OF SPOUSE COUNSELING ON THE TREATMENT OUTCOMES OF THE PROBLEM DRINKER

Paul J. Johnston, Ed. D.
The College of William & Mary, 1979
Chairman: Dr. Curtis H. O'Shell

The purpose of this study was to test the effects of spouse counseling on the treatment outcomes of the problem drinker. It was hypothesized that by working with the wives of problem drinkers, it would produce significant changes in the latter's home and work situations. It was assumed one of the two treatment conditions, although with no bias toward either, would produce better results than the other. A third assumption, again with no bias toward either, was that a significant difference would be found between the groups where the spouse participated concurrently and the one where her treatment was after her husband had completed his rehab program.

The population was composed of married clients and their spouses of whom the former were in the Langley AFB Alcohol Rehabilitation Program. The spouses, excluding the controls, and the facilitators were randomly assigned to either the education group or the counseling group. No significant differences were found on the variables of age, race, education, average number of dependents, or classification of the problem drinker. The only significant difference found was in the length of marriage between the counseling and the control groups.

Each group was 10 weeks in duration led by an agency certified paraprofessional counselor. The education group was conducted as a seminar, while the counseling group employed a variety of group exercises. At the completion of the groups all participants (husbands and wives) were asked to complete a battery which included the Mooney Problem Check List, the Marital Communication Inventory, the Michigan Alcoholism Screening Test, and the Pittman Scale. The other data compiled such as biographical information, attendance at therapy, supervisor's performance evaluations, and alcohol related incidents were routinely collected by the agency. All data was analyzed by

either a Chi-Square analysis or an one-way Analysis of Variance.

The findings showed there were no significant indications that either the education or the control group is more effective than no treatment at all. By way of contrast, 18 of 19 studies reviewed prior to the research supported the contention that aid to the wife has therapeutic benefit to the alcoholic. The factors on which positive findings were made were: a) The Attendance at Therapy was better for the counseling group than it was for the control group (probability .0204 with 1, 18 DF). b) Both the initial participation rate of 74% and the spouse's attendance of 56% for the education group and 63% for the counseling group were well above that previously reported as norm in the literature review.

When the education and the control groups were compared, no significant differences were found. Likewise, when the concurrent therapy group was compared to the spouse group, who participated after the husband, completed his rehab program, no significant differences on any of the variables were found.

The above conclusions must be interpreted cautiously. The sample size, itself, was a limiting factor - to wit - the warning received on all Chi-Square analyses that the results may not be valid because of sample size.

Recommendations for further study were reported.